DOCUMENT RESUME

ED 417 232 UD 032 170

AUTHOR Townsend, Tony
TITLE The Next Generation of Schools: Learning from the Past, Shaping the Present and Leading for the Future.
PUB DATE 1997-08-17
NOTE 64p.; Keynote address presented at the Annual Conference of the Victorian Association of State Secondary Principals (Warrnambool, Victoria (Australia), August 17, 1997).
PUB TYPE Reports - Evaluative (142) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Decentralization; *Economic Factors; *Educational Change; Educational Improvement; *Elementary Secondary Education; Foreign Countries; *Futures (of Society); Prediction; *Social Change; State Programs; Tables (Data); Technological Advancement
IDENTIFIERS *Australia (Victoria)

ABSTRACT

A look at changes in education and society between 1984 and 1997 in Victoria (Australia) makes possible some predictions about Victoria's educational system in 2010. A look at the past suggests that Australia is moving toward a third world economy that would see many Australians marginalized. An alternative to avoid this situation is to focus less on the production and selling of goods, and more on the production and dissemination of knowledge. Victoria has been the state to suffer the most from recent educational funding reductions over the past few years. At the same time, the Victorian state government has shown a commitment to educational change that has not been surpassed by any Australian state through its "Schools for the Future" program. In light of these contradictions, many people advocate further changes for the Victorian system, but it seems probable that the government could work with teachers and principals to encourage the acceptance of current reforms before looking for additional change. Evidence suggests that in the future technology will continue to change, government funding will continue to be a problem, and the social and employment needs of students will also continue to change. Being prepared for the future poses serious challenges for educators in Victoria. An appendix contains some scenarios for the year 2000 submitted to the State College of Victoria in response to their "Teacher Education Inquiry." (Contains 3 figures, 17 tables, and 91 references.) (SLD)

The next generation of schools: learning from the past, shaping the present and leading for the future

A keynote address presented at Annual Conference of the Victorian Association of State Secondary Principals, Warrnambool August 17, 1997

Associate Professor Tony Townsend
Director, South Pacific Centre for School and Community Development
Faculty of Education
Monash University
Australia
Telephone: (03) 9904 4230
Facsimile: (03) 9904 4237
email: tony.townsend@education.monash.edu.au

Many schools are like little islands set apart from the mainland of life by a deep moat of convention and tradition. Across the moat there is a drawbridge, which is lowered at certain periods during the day in order that the part-time inhabitants may cross over to the island in the morning and go back to the mainland at night. Why do these young people go out to the island? They go there in order to learn how to live on the mainland.

(Carr, 1942:34)

Introduction

The international trend towards devolution of many of the decisions and responsibilities for managing schools to the school itself, with the end point being self-managing, or self-governing public schools, has been perhaps the most powerful influence changing the understanding of leadership in education over the past two decades. Instances can be seen in Canada, where the Edmonton School District pioneered many of the features we see today, in the United Kingdom with Grant Maintained (GM) and Locally Managed (LM) Schools, in the United States with the charter school movement and in New Zealand, which adapted the Canadian model as a means for developing a national system of self-managing schools called *Schools of Tomorrow.*

In recent years there has also been substantial change in the way in which education is structured, financed and managed in Australia. The move towards more self-managing schools, complete with school councils, school charters, school global budgets, quality assurance, school reviews, and the like, are now a feature of most, if not all, Australian school systems. One only has to look at the changes occurring in New South Wales (Cuttance, 1997) and Victoria (Directorate of School Education, Victoria, 1993) and those that are emerging in Queensland's *Leading Schools* (Department of Education, Queensland, 1996) and Tasmania's *Directions for Education* initiatives to see the emphasis being placed on accountability, marketing and management, particularly as they impact on school communities.

This change could been seen as being a destabilising force within school systems, perhaps because it could be argued that some schools have struggled to come to grips with new requirements, new procedures and new accountability measures. However, other schools have flourished under self-management. This seems to be the classic implementation of the Chinese word 'crisis', which is made up of two characters, one meaning 'danger' and one meaning 'opportunity'. School restructuring has been characterised by some as being a danger to the public school system and others have seen it as an opportunity, particularly for their own school. Townsend (1997: 225) characterised this in the following way:

> People currently involved in restructuring efforts could be considered as analogous to the surfer catching a wave breaking on the shore. They might remember the time when the sea was smooth, but now are faced with all sorts of upheavals that a breaking wave brings. Some will catch the wave and pick up speed towards the future, others will be dumped, and yet others will miss the wave altogether and be relegated to the thoughts of the past.

Just four years after the implementation of *Schools of the Future* the next wave has already hit. Schools of the Third Millennium, Successful Schools and Building on Schools of the Future is now the terminology of the future. *Schools of the Future* are already things of the past. This has caused a further wave of instability as school communities ponder the announcement that there will be further change but without any

indication of how this change might impact. Will there be further staff cuts? Will technology take over? Will social justice issues be further eroded? The instability generated by uncertainty has probably lowered staff morale, staff motivation and staff performance as they become more concerned about their future than their students' present. Yet we need to understand how we arrived at where we are in order to proceed in a way that has both an educational (rather than economic) rationale and community support.

As a means of linking the past, present and future, I would like to focus my attention on the recent conference on *Successful Schools*, jointly sponsored by Education Victoria and the University of Melbourne in June. This was a particularly important occasion because it provided some insights into both educational and political thought about where we are heading. At the conference Minister Gude (1997: 2) announced his vision for Victorian schools: 'the best possible education system the community can offer our young people to the generations that will lead us into the 21st century', which reflected Minister Hayward's 'world's best practice' statements of just a few years ago. It was good to hear him announce: 'We are lucky to have an education community that is dedicated and hard working: Principals; teachers; parents; and students alike' because this has not been a consistent message put forward by the government over the last couple of years, but is a welcome basis for building our future.

In announcing the need to build on *Schools of the Future*, the Minister announced the establishment of three working groups, to look at innovative multimedia, autonomous schools and quality management, issues that speakers at the conference addressed in their presentations and central themes for this conference on **Taking the Lead in our Schools**. As a means of justifying looking at the past, the present and the future, a couple of observations the Minister made are particularly pertinent here. The first provides the basis for thinking about the future: 'a student in prep today will graduate with the VCE in 2010', and the second provides a rationale for looking at the past: 'Today's VCE student entered prep in 1984' (Gude 1997: 3).

I see the present as simply the midpoint between the past and the future. By looking at the changes, in education and in society, between 1984 and 1997 we may be able to make some predictions about how far we might travel by the year 2010. Consequently, the rest of this paper will direct itself to three purposes:

- To use the past as a means of understanding the present;
- To consider the present as a means of preparing for the future;
- To consider the future possibilities for schools and school leaders.

Learning from the past

Predicting the future is a risky business. Not only are there possible futures, probable futures and preferred futures, but just the prediction itself might make one or the other of the possible futures a self-fulfilling prophecy. If we predict good things, we work towards attaining them and the prediction is more likely to come true. If we predict bad things, we work towards preventing them from happening and the prediction may then be way off. However a look at past predictions may help us to see towards the future a little bit better. If predictions made in the past have been fairly accurate, it can give us some confidence about predicting what might happen in the future.

In 1979, I was part of group of people who made some predictions about the world and the teacher's role in it for the year 2000 (see appendix for complete details) as part of the *Submission of the State College of Victoria at Frankston to the Teacher Education Inquiry* (the State College of Victoria at Frankston, 1979) to both Commonwealth and State Inquiries into Teacher Education. Some of our predictions seem now to be pretty accurate and others were way off the mark. Some that were pretty accurate include:

- The proportions of population in the higher age groups of the population will have increased.
- The type of population in the future will change from a predominantly European origin towards a more Asian/European background with the subsequent alterations in cultural and religious patterns.
- The development of automation will result in job elimination.
- Work will have to be invented to give people a feeling of social usefulness.
- Some people will not be employed for the whole of their lifetime.
- Economic factors will be the most important ones considered when decisions are made about education and welfare.
- Children will break away from the traditional family grouping and form other groupings.
- The significant increase in the quantity and quality of information will create an information elite.
- Skills other than the 3R's will be regarded as basic.
- The expertise needed to fulfil the needs of 'learning groups' will not be that possessed by teachers as trained in the 1970s.

Some that might be considered way off the mark might include:

- The inequality in the distribution of goods and services will have diminished.
- There will be a shift in the need for money as a personal resource.

There were others where it could be argued that, although we are not there yet, certainly we are trending towards a particular scenario:

- The nominal hours per week of work will have decreased to 32-28 hours.
- Work and occupational role will no longer determine so directly the lifestyles of individuals.
- As fuel becomes scarce there will be less mobility in terms of travel from home to work or entertainment, with a consequential increase in the importance of local community facilities.
- Students in small or isolated institutions will have the same access to information as students in large educational institutions.
- The basic organisational module in educational institutions will be 'learning groups', not classrooms.

Generally speaking, however, the world is pretty much like what we predicted it would be and many of the responsibilities that teachers have now were fairly accurately predicted as well. Some of the teacher responsibilities that are now features of *Schools of the Future*, but were not as evident in the 1970s, include:

- To assess the educational needs of individual learners and to prescribe appropriate learning programs to meet these needs.
- To update continually one's own knowledge and expertise to maximise effectiveness of learning experience.
- To develop personal and professional attitudes necessary for work as a member of a team.
- To establish appropriate relationships with a growing body of para-professionals and support staff.
- To work co-operatively with other professionals to produce teaching strategies appropriate for the achievement of instructional objectives.
- To develop a commitment to the concept of life-long learning and one's own involvement with all sections of the community.
- To assess educational needs of the community and to determine appropriate responses to those needs.

- To participate with others in the community in a wide range of educational decision making.

- To adopt strategies for coping with the stress of changing society and new roles and interpersonal relationships with students, colleagues, paraprofessionals and parents.

- To utilise research findings and other means of furthering professional growth.

This suggests that it is possible to look at current situations and make some fairly accurate suggestions about what the future might be like. In this way the *Submission of the State College of Victoria at Frankston to the Teacher Education Inquiry* in 1979 and the *Education 2010* (Preferred Futures, 1996) document are similar.

If we look at human history over a longer period of time, it will not take us long to discover at least two things have been the dominant shapers of our current society. First, human progress never seems to stop and it seems to be happening at an ever-increasing rate. Second, the emerging globalisation of the economy has changed the way in which we think about ourselves and the world. Both of these factors have impacted on our communities more in the recent past than ever before. It is worth reviewing how this has happened and what it has meant.

The Impact of Change on Society and Education

It appears that technology has its own version of Zeno's Paradox (the Greek philosopher that suggested if you took half of a pile of sand, then repeatedly took half of what was left, you would never actually have no sand left). Technological change has increased rapidly, as was pointed out in 1970 by Alvin Toffler in *Future Shock*, and it continues to speed up. We think that it must slow down sometime soon, but it never does. We might be getting closer and closer to the limits of human ingenuity but we are not there yet, and possibly will never be.

For instance, table 1 shows it was 116 years between the first manned flight (in a balloon) and the first powered flight at Kitty Hawk. It took nearly four generations to move from the first phase of flight until the second. In the subsequent three generations we have moved through jet engines to moon walking and reusable spacecraft.

Table 1: Developments in Flight

EVENT	YEAR	YEARS AGO	GENERATIONS AGO
First Balloon	1784	213	7
Zeppelin	1900	97	3
Powered Flight	1903	94	3
First Jet Flight	1942	55	2
First Space Flight	1957	40	1.3
Man on Moon	1969	28	1
Reusable Spacecraft	1977	20	.7

There was a similar time span (107 years) between the first formalised means of communication between people, the wire telegraph, and the first powered means of communication, the wireless telegraph, as shown in table 2.

Table 2: Developments in Communication

EVENT	YEAR	YEARS AGO	GENERATIONS AGO
Wire Telegraph	1794	203	6.5
Wireless Telegraph	1891	106	3.5
First Radio Program	1906	91	3
First Colour TV	1928	69	2.3
First Computer	1942	55	2
TransAtlantic Cable	1957	40	1.3
Home computers	1976	21	.7
Home Video recorders	1979	18	.6
CD-Rom	1990	7	.2
World-Wide Web/Internet	1994	3	.1

An instance of what this meant is that, in the 1860s, the death of Abraham Lincoln was not reported in London until 12 days later, the speed of travelling on water, but just two generations later, wireless had been invented and the disaster of the Hindenberg Airship was graphically portrayed as it happened to listeners all over America.

A further three generations on from the wireless telegraph, the Macintosh computer that I now use uses gigabytes instead of kilobytes. I walked into a computer shop recently where they were displaying an Apple IIC, which was on the market for $1745 just ten year ago. Many of the programs Victorian schools receive by satellite today are totally edited at Monash on a Macintosh computer with more than a million times the memory of the first apple of just twenty years ago. I am now able to access instantly millions of computer sites all around the world through Internet. I cannot walk out of a computer shop with a new computer without it being obsolete by the time I get it home. It took four generations to move through the first phase of development, but the subsequent three generations have seen massive changes.

It almost seems as if it takes humans about a hundred years or so to work through a manual way of doing things to the 'powered' approach, as described by the flight and communication examples. If so, then education may well be just entering its powered phase. Just as there was a hundred year hiatus for both flight and communication, there was just over a hundred years between education being made 'free, compulsory and secular' and the Karmel Report in 1973. The Report to the Commonwealth Government by the Interim Committee for the Australian Schools Commission, entitled *Schools in Australia* (Karmel, 1973), was described by Caldwell (1993:3) as 'arguably one of the most influential documents in school education in the last twenty-five years'. Since that time, less than a single generation has seen, among other things, the movement from a debate about community involvement in educational decision-making to the formalised practice of it.

However, educators in Victoria can take heart that we live is one of the more forward thinking and progressive places in the world. Even in the 1870s Victoria was ahead of the times in education and it has remained so to the present day. Victoria's 'free, compulsory and secular' Education Act was the first of its kind in the world in 1872. Germany established formal education in the same year, but it was neither secular nor free, other Australian states did not follow until 1875 (Queensland and South Australia)

or later, New Zealand not until 1977, France 1886 and Britain 1890. Victoria also pushed the boundaries of change in the 1970s with the introduction of school councils and community education, the latter being a victim of budget cuts by the mid 1980s. More recently, one of the foremost promoters of school self-management internationally, Brian Caldwell, has now been working with Victorian governments for almost fifteen years, first with the development called program budgeting, which almost led to the first self-managing school system in the world in 1986 when the Labor Government put forward *Taking Schools into the 1990s: A proposal* (Ministry Structures Project Team, 1986) and later with the Liberal government on *Schools of the Future*. It is clear from documents such as *Education 2010* that the impact of technology on education and the rate of change that we might expect in education has not yet reached its zenith.

Restructuring the economy

Our place in the World

First, some home truths. Much of the recent reform of education, by both sides of politics, has been based on the premise that we need to become more competitive internationally. Educational restructuring is simply part of a broader attempt to change Australian society, one that might give us cause for some concern. The current movement to self-managing schools needs to be understood as a component of large scale change: to the economy, to social systems and to people themselves. Education and training is seen to play a vital role in this restructuring of Australia and the linkage between education and employment is perhaps stronger than it has ever been before.

Yet do we, in Australia, have an unrealistic perception of our place in the world? Every time there is a meeting of the leaders of the 'Big 7' nations, we see local reports asking why we are not there. We were not seen to be important enough to join the UN Security Council. On one of my visits to the US, Prime Minister Bob Hawke was visiting President Bush. The only press report that I saw of his visit was one that referred to Mrs Bush moving a banquet for him from the White House garden to inside because of the heat. There was no mention in the press of anything related to our policies or activities. Yet, we feel aggrieved when our importance is not recognised.

The 1997 Encyclopedia Britannica Yearbook shows we are not one of the big seven, or even the big ten or big twenty. On 1996 population estimates, we are not even in the big fifty, and with our growth rate at 1.1 per cent, we are losing ground fast. Mozamibque, with a growth rate of 4.4 has overtaken us between 1995 and 1996. The truth is we have less than one third of one percent of the world's population and, day by day, that figure gets smaller. Our population is only two-thirds that of California, yet Melbourne and Sydney, paradoxically, are larger (depending on the way the figures are collected) than all American cities except New York, Chicago and Los Angeles. Perhaps it is because most of us come from a large cosmopolitan city that we have an inflated opinion of ourselves. In terms of the economy, we are 27th of 217 countries on our per capita GDP and our total GDP is one third the size of the United Kingdom, one ninth the size of Germany, one twelfth the size of Japan and one twentieth the size of the United States.

Yet we are still among the fortunate minority of people in the world who live in a society where human rights are practised more or less universally. If we think about the leisurely pace of change a hundred years ago, it may come as a surprise to discover that last century in Britain, the Act establishing education as a national priority came just forty years after the Act that abolished child labour. By an Act of Parliament in 1833, children under 9 were no longer allowed to work. Children from 9 to 12 were 'restricted' to just 49 hours a week and those from 13 to 18 to 69 hours a week. It didn't take long for the British to discover that having the children of the poor running around the streets of London while both of their parents were in factories or down in

the mines for hours on end had social ramifications. By the 1860s, more than four million school age children from the poorer classes were neither in school, nor being looked after by their parents, and so the journey towards compulsory education began. The response was quite swift in historical terms. The Elementary School Act of 1870 saw schools available to everyone. By 1890 elementary school was compulsory and by 1891, it was free.

However, a quick perusal of recent press reports or the Internet will show us that child labour is not a thing of the past, it is simply a matter of geography. Recently Nike have been fighting a public relations battle about the use of child labour that sees their products made from labour priced at 53 cents an hour yet costing up to US$ 117 a pair. Michael Jordan makes more annually out of Nike than whole factories of workers in Indonesia. Jeff Atkinson (1997), Community Aid Abroad's research officer, reports:

> The International Confederation of Free Trade Unions estimates that some 100 to 200 million children between the ages of 4 and 15 are 'labouring in mines, making matches, selling gum in the streets, cooking, washing clothes, working as domestic servants, weaving carpets, making clothes, sewing underwear, or working in the fields, the plantations or on building sites around the world'.

However, the pressure being placed on various countries about their use of child labour has created interesting developments in education. Not only have countries such as England, New Zealand and Australia embarked on educational change, but Hong Kong, Thailand, Malaysia, China and Korea, among others, have moved in the same direction. Yet there are clear differences between the policies of the west and the policies of the east, with nothing being more obvious than the issue of resources. Whereas countries such as Australia, the UK and New Zealand brought in their self-management policies at a time of unprecedented budget cuts, both Thailand and Malaysia have predicted substantial budgetary increases in the short and long term and a massive commitment to education as a central component of economic development. The Minister of Education of Thailand (Rangsitpol, 1996: 3), at a recent UNESCO Conference on Re-Engineering Education identified his government's 'policy to expand compulsory education from 6 years to 9 years and eventually 12 years.' The self-managing school concept was to be introduced not with cuts, but a 22.5% increase in the education budget from 1996 to 1997.

Improving our Competitiveness: Third World or Third Millennium?

If we are having difficulties competing with such countries in areas such as manufacturing now, how much more difficult will it be if they have a fully educated workforce, one that is prepared to work at much lower wages than our current workforce will do? Since 80% of our economy is internal anyway, moves to be internationally competitive will only affect 20% of it. There is a separate argument about whether or not we need to increase continually our levels of consumption in the first place, given the environmental, social and economic predicaments we are already in. It could be debated whether this is a short or long term path to disaster. There is a further argument about whether we will have any manufacturing industry at all in the future or whether technology will have replaced all but a few people working in that sector. But they are for others to argue at another time.

In both population and in economic terms we are a small nation and, as such, uncompetitive in many areas. These factors lead to Australia's inability to compete internationally, particularly in areas economic. Yet the government and economists are arguing that we should be able to compete. Since we can no longer rely on our natural resources to maintain our living standards, there are only two ways of increasing our influence in the world. The first relates to becoming more competitive in terms of our

manufacturing base and the second involves becoming world's best in terms of knowledge production and dissemination.

The Third World Choice

Maintaining first world living standards for all is incompatible with manufacturing goods at third world prices. To accomplish this means to have a majority of the population working for third world wages, thus ensuring that a small proportion of the population can maintain their first world standards. This is a similar situation to many third world countries now. Millions of people work for pennies to keep a comparative few in luxury. Australia, among other nations, has complained about the human rights issues that exist in some of these countries, yet it could be suggested that things such as the 'Accord', which restricted wage growth for more than a decade, together with recent changes to labour laws, have opened up the possibility of this happening here.

Mr Gude's 1984 reference, that mystical time when 'big brother' was watching, is useful in that it enables us to view societal change over the course of a single group of students' school lives, those that this year will complete their VCE. In some instances, I am unable to use 1984 figures because comparative data to that kept now was not kept then. But the Australian Year Books of 1988, 1990 and 1997 contain a wealth of facts that describe the changes in our society over the time that we are using.

As the tables below show, Australia is a very different place from the time when today's VCE students were in prep. One of the most dramatic changes has been a dramatic shift in employment which has brought with it changes in the financial, social and welfare positions of both individual families and whole communities.

Total employment has grown by around 17% between 1987 and 1996, from just over 7 million to 8.3 million people. However, a more detailed analysis shows that the growth patterns have not been uniform. Table 3 indicates that the unemployment rates in 1996 are approximately the same as those of 1984, however in 1984 unemployment was on the rise, whereas in 1996 it was trending downwards. The figures discount those who were undertaking either part or full-time employment whilst studying at school or university.

Table 3: Changes in Employment

Employment	Australia 1987	Australia 1996
Full-time	5,656,200	6,260,500
Part -time	1,416,900	2,029,200
Male Unemployment	8.7%	8.7%
Female Unemployment	8.3%	9.3%
15-19 Unemployment	20.6%	34.7%
20-24 Unemployment	17.7%	19.4%

However simply to report the overall growth rate disguises a rapidly changing society. These figures can be further analysed on the basis of three factors critical to our communities. The first is the difficult situation of youth unemployment, the second is the move from full-time to part-time employment, and the third is the difference between male and female employment growth.

Table 3 shows that it is more difficult in 1996 for young school leavers to become employed than it was in 1984 and there is also a rapidly changing proportion of people that are employed part time rather than being fully employed. Table 4 indicates that

although overall growth was 17%, the growth in full time jobs was just 11%. Most of the new jobs were part-time where there was a 43% growth between 1987 and 1996. Also male employment grew by just 11% (full-time 6%, part-time 65%) and female employment grew by 27% (full-time 20%, part-time 38%).

Table 4: Employment growth

Growth in Employment in Australia 1987-96	Full time	Part time	All employment
Total	11%	43%	17%
Male Employment	6%	65%	11%
Female Employment	20%	38%	27%

What these tables indicate is that much of the responsibility for growth in employment has been thrust upon people, particularly women, who are prepared to work part-time. There has been very little growth in employment for males and younger males, who are more likely to leave school early, have very little chance of becoming employed. Young males, who perceive themselves as having few prospects in the future, have responded to this with violence to others and themselves through suicide and massive increases in drug and alcohol abuse. These factors have an impact on education too, because the shift from full-time to part-time employment has had the effect of lowering the overall income levels of families thus making it necessary for both parents to work. With both parents working, the levels of family support and guidance, particularly for those mentioned above, have diminished. The changing patterns of work (or non-work) may be the root cause of many of society's current ills.

The changing nature of work has also had an impact on the comparative wealth of families. Table 5 shows the comparative rates of pay for 1984 and 1996. It indicates that the average adult weekly pay, before overtime, has increased substantially. But if we add the information from table 4, we find that, more and more, those in full time work are becoming much better off than those in part-time work or those that are unemployed. As most of the new work is part time, these gaps are getting wider.

Table 5: Changes in Pay rates

Employment	Australia 1984	Australia 1996
Average Adult Weekly Pay	$375	$715

Table 6 compares the purchasing power of the 1984 family with that of 1997. The tables indicate that, on average, families in 1997 are not as well off as those of 1984.

Table 6: Mean household weekly income and expenditure

Mean Household weekly Income and Expenditure	Income 1984	Expenditure 1984	Income 1997	Expenditure 1997
lowest 20% of Households	$116	$164	$152	$303
2nd lowest 20%	$238	$262	$354	$426
3rd lowest 20%	$389	$347	$592	$573
4th lowest 20%	$569	$428	$909	$714
top 20% of households	$957	$607	$1609	$994
Average across Australia	$454	$362	$723	$602

Table 6 indicates that whereas average weekly household income has increased by 58% over the period 1984 to 1997, although the increase of 66% in mean weekly expenditure per household more accurately reflects the impact of inflation over than time. Tables 5 and 6, together show us that whereas less than sixty per cent of families had a household income less than the average adult weekly earnings in 1984, by 1997 this had risen to around 70% of households.

The increases in income and expenditure has not been uniform across the income groupings. The lowest 20% of families only increased their weekly household income by 22%, whereas the top 20% increased by 67%. Conversely, the poorest 20% of families increased their household expenditure by 159%, whereas the top 20% only increased their expenditure by 63%. The figures indicate that, on average, families in the lowest 20% of household income spend about $150 per week more than they bring in (utilising credit or other lending facilities) and that families in the top 20% of household income are able to save about $600 every week.

Any reasonable reading of the figures would suggest that there has been a shift of wealth from the poorest to the richest in our communities since 1984. The poorest forty percent of households in Australia are considerably worse off in 1997 than they were in 1984, the middle income households are around the same as they were in 1984 but the richest twenty per cent is the only group that is better off, although only slightly, than it was in 1984. The evidence suggests we are moving even further away. How else should we interpret the reason provided by the Treasurer for the introduction of a GST? '...the negative impact on incentives to work resulting from the Government's reliance on income tax to generate the larger part of its Budget revenue' (Short and Henderson, 1997:1). The GST is designed to cut income taxes, which means those on the highest income will have the most to gain. Since there is no suggestion that the total tax revenue will change and since the GST is designed to lower direct taxes, then those people who spend the most will pay the most. As table 6 demonstrates, in proportionate terms, this is likely to impact on those at the lowest levels of income, who spend all their income on goods and services. The poor will be even worse off under a GST scheme than they are now.

Other instances that we might consider as evidence related to supporting the rich at the expense of the poor might include the move to provide tax rebates for savings through superannuation or banks rather than make people pay tax on them, the $100 rate tax which impacts differentially on poor and rich rate payers and cutting the budget for education and health while having taxpayers support the Grand Prix and *Sunset Boulevard*. Given the figure above, how many people from the bottom forty per cent of families could even contemplate attending either of the two activities mentioned?

The household income and expenditure figures confirm the anecdotal evidence provided by research, such as that done by the Smith Family and the Brotherhood of St Laurence (BSL, 1996), that families at the lower end of income generation are having to deal with an unacceptable proportion of the economic change that has taken place. Table 7 indicates that the proportion of families with dependent children struggling against all the economic odds is growing each year.

Table 7: Dependent child families in low income homes

% of families with dependent children in the lowest 40% of income categories	Australia 1984	Australia 1997
	7%	17%

A recent report by Monash researcher Bob Birrell, reported in *the Age* (Milburn, 1997: 1), suggests than up to one in three adults and 41% of children rely on government welfare payments to survive. In real terms the number of children in chronically poor homes (1995 incomes less than $24,000) has risen from 93,000 in 1987 to 688,000 in 1995.

Galbraith (1992) argues we have lost the commitment to the common good. We no longer see beyond our own needs to the necessity of providing a basic standard of living for everyone. It could be argued that this has developed, in Australia at least, with the coming of age of the 'baby-boomers', that group of people born near the end of the second world war. It also may be the case in other western societies. Minzey (1981) said that this group is going through society like a watermelon through a boa constrictor.

Ever since history began, each generation was slightly better off than the one that preceded it, in educational terms, in social terms, in income terms. Those who had the power to make decisions seemed to take the view that development needed to continue. Take, for example, those involved in making decisions for the 'baby-boomer' generation in Australia. Universal secondary education was put in place after the war so that they could all get a decent education. By the time they reached university, pressure was placed on governments to enable free tertiary education as well. By the time university or college was completed, everyone who wanted to work was able to find a job. For the first time women entered the workforce in large numbers and, as they found inequities in the system, tried to address them. Things like equal pay for equal work, women's liberation and the assault on the 'glass ceiling' can all be attributed to the 'baby-boomer' generation.

However, somewhere along the line something seemed to go awry. We entered the age of 'me-ism'. The attention and resources devoted to this group seemed to create a monster, almost in proportion to the resources expended on them. The more education the boomers received, the better their jobs and their material wealth, the more they wanted. The selflessness of previous generations created a selfishness in the boomers that, it could be argued, largely still remains.

They dabbled in sex and drugs and opened a Pandora's Box which we have still not been able to close. Some chose not to marry or, if they did, married late and had children even later. In many cases the need to 'establish oneself' (read 'gather material resources') was given as the reason. Children were partly raised by grandparents or childcare agencies because both parents chose to stay at work. Divorce rates sky-rocketed, some would argue because the parents chose their own well-being over that of their children. The gap between the haves and the have-nots started to widen.

And where are these people now, twenty or so years later? Those that succeeded in the 1960s and 1970s are now the powerful people in our community. They are the ones shaping decisions in government, in commerce, in society. They seem not to mind about high youth unemployment because they can look after themselves and their own families. They do not care about the demise of the public health system because they have health insurance, or the demise of public schooling because their children have gone through school and probably university. They care not for public transport or public housing because they don't use either.

They are at the peak of their earning capacity and they want to maximise their advantage while they can. They are the economic rationalists who demand decreased public spending so that governments can decrease taxes, thereby maximising company profits and personal gain. They are the executives seeking massive pay increases and benefits while exhorting the workers to do more for less. They wish to take money away from

schools because they have finished with them. They wish to take money away from health services because they are not yet old enough to be suffering the problems of old age. However, a sign of the future has recently emerged. A recent report (Alcorn, 1997: 1, 4) describes how a drug used in the treatment of impotence has now been placed on the Federal Government's Pharmaceutical Benefits Scheme, which means that baby boomers suffering impotence problems now pay $4 instead of $29 for an injection that enables them to perform. The taxpayer now pays 80% of the cost. The medical director of the company involved said 'The baby boomers are a big group who are going to play all sorts of havoc in the future' (Alcorn, 1997: 4). In ten years time prepare for a massive increase in the health budget. The unemployed have themselves to blame. Any money allocated to social service of any kind is seen as a cost to society rather than a benefit. They have lost the sense of the common good. Profit has become equated with progress, community has given way to commerce and sharing is a sign of weakness. For the first time, the generation following the baby boomers will be poorer than their parents, in all senses of the word.

Our politicians, of all parties, have listened, and are listening to, the boomers because they are the most powerful and vocal group in society. It is my belief that those arguing for downsizing public expenditure (to provide tax relief) started to hold sway over those arguing for increased public support services around the mid 1980s, which was the time when the crossroads of increasing public expenditure and increased calls for tax relief intersected. Since that time both sides of government have adopted various strategies to change the balance. They sold public assets (but only those that are profitable, since business doesn't want to buy those that make no money) and introduced a variety of strategies to make ends meet. They shifted money from one portfolio to another and then shifted it back a couple of years later, in the endeavour to make everyone happy at least some of the time.

They introduced 'user pay' schemes, but it seemed that the people who most needed the service couldn't afford to pay and those that could afford to pay didn't need the service. The user pays mentality exacerbates this problem because it not only cause problems for individuals but actually leads to the demise of services. If the only people who require a service are those that cannot afford to use them, then the service itself becomes unviable and is likely to attract less government funding on the basis that no-one uses the service.

'Productivity efficiencies' were introduced, which is a short way of arguing that although the number of users of the service (hospitals, tertiary education) increased substantially, the increase in funding lagged far behind. None of these schemes worked well enough to satisfy the greed of the boomers. Anil Bordia (1996), at the UNESCO Conference already mentioned, summed up by arguing 'The world has enough resources for human need, but not enough for human greed.'

Whether my reasons for why the current situation we are in are sound or not, I think that I have demonstrated that Australia could currently be considered to be moving towards the third world economy that would see many Australians marginalised so that a few of us can live in the manner that we think we deserve. However, there is an alternative view, if we care to pursue it.

The Third Millennium Choice

The second way to promote our position in the world economy is to sell ourselves at the top end rather than the bottom, not by manufacturing and selling goods, but by producing and disseminating knowledge. If we ensure that we focus on the future and move towards what will be economically productive in that future, a small country can offer high quality services in the knowledge area to all other parts of the world. High

technology is the way of the future and the Internet is the new world market. If we can produce something that is best in the world and is something the world needs, then the opportunities are enormous.

Australia has always been able to develop technologies of use to the world from the stump-jump plough to the wine cask, from the black box used on every airline in the world to the bionic ear. A recent instance of Australia's ability to do this is the use of nanotechnology to promote new medical capabilities. Using an Australian product, the nanomachine, it is now possible to detect the equivalent of a cube of sugar in a volume of water the size of Sydney Harbour, which has potentially changed the face of detecting illness in humans. O'Neill (1997: Features/5) describes the new skills required by scientists to not only develop such breakthroughs, but also to keep ahead of the opposition in such developments, to maintain the competitive edge on other countries. For almost a decade, scientists, who live and die by publishing what they have learned, had to commit to secrecy so that other people would not find out what they knew.

The current transformation of education needs to be given a historical perspective. In 1983, when our current VCE students were at their final year of pre-school, Minzey and Townsend reflected on the impact of technology on education.

> Imagine for a moment the possibilities. An interactive television system has access to computer facilities that store in their memory banks educational information. Instead of reading about volcanoes or hearing about them from the teacher, a child can program his computer and see a volcano at work. Through the interactive system, he can ask the computer any question he wishes about volcanoes. Imaginative programs could maintain the child's interest and provide a one-to-one learning experience for up to thirty or more children. Lessons may be for two or three hours a day broken down into short sessions that account for the child's age, intelligence and attention span. Social interaction can take place at a designated time during the day under the supervision of parents or paid leisure workers. If we look at the supervision situation at schools during recesses, then there would probably only be the need for one supervisor for every two hundred children. A terminal placed in the child's house also does not work set hours. A program may be called at 6:00 am. or 7:00 pm. and consequently could align itself far more easily to the motivational aspects of learning. It is thus possible to replace some of the teaching responsibilities of a teacher with a machine that is capable of providing information faster, and perhaps more accurately, than a teacher can and to replace the supervisory functions of a teacher with a specially trained supervisor who is capable of handling more children at once than a teacher is paid to do.
>
> (Minzey and Townsend, 1983: 10)

They also commented on the impact of changing community views about the cost-effectiveness of schools in terms of the proportions of the population served by them.

> At a time when approximately eighty percent of the population, who feel they receive little or no direct benefit from the education system, contribute millions of dollars in taxes on capital and recurrent expenditure in schools for twenty percent of the population, who make no contribution to the cost at all, arguments that may suggest replacing expensive teachers with machines that cost less while still performing a similar task may become more attractive.
>
> ...When the community at large has these feelings about education, it makes it easier for governments to cut education budgets. Recent events

> suggest that if budgets are cut, there is very little community protest. Those who do protest have a direct stake in education - the general community remains silent.
>
> (Minzey and Townsend, 1983: 11)

They argued that there was a need for schools to change to what they called a 'core-plus' education, where the core activity was to 'encourage and support those activities which enhance community life' and the plus part of the plan would be program based and 'consist of all the formal classes, courses and offerings for all the members of the community' (Minzey and Townsend, 1983: 12-13).

> The most important aspect of core-plus education, however, is its change in the perception of what pubic schooling should be. It starts with the premise that schools must change because society has changed, and it suggests the development of an educational system to replace the school system. Paramount to this thought is the idea that schooling is but a part of education and that only an educational system which deals with life education for all members of its society can provide for the educational needs of its people and its community in the years ahead. It accepts the fact that there is no terminal date or final degree for an educated person.
>
> (Minzey and Townsend, 1983: 19)

A further decade back, the Karmel Report of 1973 was probably the turning point in Australian education for it was here that the issues of equality, devolution and community involvement were first presented as part of a national educational debate. We could go even further back to discover the historical source of the argument presented by *Education 2010* that schools should be firmly embedded in their community, at least in Victoria. The Victorian Education Department in its 1934 General Course of Study (Education Department of Victoria, 1933) makes the point:

> It is considered that schools will do their most satisfactory work when they function as community centres, and generally share in community life.

It could also be argued that if education follows other forms of human development, what has happened up until now is just the tip of the iceberg. Let us take an educational example of the Third Millennium view of development. If one of your teachers has what might be considered to be world's best practice in terms of teaching mathematics, or music or science a method that is both student-proof and teacher-proof, to the extent that it could guarantee success, why could it not be packaged and made available to others worldwide? The literacy work of Robert Slavin with 'Success for All' and Marie Clay with 'Reading Recovery' are early instances of what can be done.

If we could develop such things in Victoria, both the school (as publisher) and the individual teacher (as author) would benefit, in terms of money and reputation. If your school was known to have the best maths teaching in the world, could you market this to international students, either in person or through flexible delivery? Could we not encourage our students to be entrepreneurial in this way? What do we need to teach them for this to happen? Could not this skill base be equally marketable? I would think that the current government and the Department of Education may be interested in supporting, and perhaps funding, such a move. Victorian schools would no longer have to compete with each other. Clusters of schools, each with their own particular strengths, could be serving their local community directly, utilising the best practice we can find from all around the state, and competing internationally instead of with each other.

However, we might also want to go one step further, by producing an educational system that promotes these types of skills; vision, entrepreneurship, high level development capabilities, teamwork, not in just a few of our students, but in most of them. We would not only be able to sell our products, but the educational system that developed the people who made them. An alternative view to the Third World solution to our current economic problems is possible, but only if we accept that all people in the future must be capable, skilled and self-motivating.

In order to do this we need to change our focus from the past and present towards the future and we need to change our education system to match that future.

Some observers have considered that the current Victorian decentralisation activity has been used as a means to generate improved student outcomes (an issue of quality), while others have considered that it has been used as a way of winding back the money spent on education (an issue of finance). For those in the first camp, the identified reason for much of the decentralisation of educational management to the school site is that it will improve the quality of education for Victoria's children. This is typified by the rationale for *Schools of the Future*, which is a 'commitment to the view that quality outcomes of schooling can only be assured when decision-making takes place at the local level' (Directorate of School Education, 1993:1).

It argues the self-managing school is the model required for education as we head towards the next millennium. If each school is given equal resources (according to the needs of the students) and equal powers to determine the direction of the school, then all schools should be able to perform equally well when it comes to educating children. Successful schools can be held up as a beacon of possibility and less successful schools can be blamed for their own failure to achieve. Eric Hanushek had argued that there was little consistent relationship between educational expenditure and pupil achievement (Hanushek, 1986:1161). This allowed many governments to argue the case that they could increase the quality of student outcomes and decrease expenditure on education simultaneously.

For those in the second camp, there is the suggestion that this restructuring is a deliberate attempt by government to offload its legal responsibility for the education of the population onto individual communities and then blame those communities if they don't succeed. McGaw (1994: 10) suggests that there is a case to be made that some systems are implementing a covert centralisation as more powerful control mechanisms replace others that are done away with. He uses the case of an abandonment of detailed program prescriptions concurrent with an introduction of detailed mechanisms for surveillance and evaluation as an instance of this. He argues, as do Hargreaves and Hopkins (1991), that care needs to be taken that the 'devolution of responsibility' does not simply become a 'displacement of blame', particularly where transfer of responsibility is accompanied by a decreasing resource base. For some, self-management has more to do with money than it does with quality. For instance, Smyth (1993: 8) argues:

> One of the noticeable (indeed, even remarkable, or is it?) features of the move towards the self-managing school phenomenon around the world, is its occurrence in contexts of unprecedented education budget cut-backs. Whenever there is a break out of self-managing schools, the notion is used as a weapon by which to achieve the alleged 'efficiencies' and 'downsizing' of education.

McGaw (1994: 10) argued that many of the recent restructuring activities accompanied by simultaneous cutbacks in education indicate a lack of faith in the impact of resources which resulted from the substantially increased dollars per student allocated to schools in the 1970s and 1980s without any systematic research to indicate the benefits of those increased resources. He suggested that the current policies of resource reduction 'are based, not on the evidence that there will be no negative effects, but on lack of evidence to the contrary'.

The truth of the matter is that there are two simultaneous, but separate, activities going on. Many of the people involved in the development of *Schools of the Future*, from principals to academics to bureaucrats have been involved in the establishment of a system that might be called 'cutting edge education'. As someone that has seen many systems around the world, I have yet to have seen a better one. There may be better schools here and there, but the Victorian system is world class. In my book *Effective*

Schooling for the Community: Core Plus Education (Townsend, 1994a) I defined an effective school as ...

> ...one that develops and maintains a high quality educational programme designed to achieve both system-wide and locally identified goals. All students, regardless of their family or social background, experience both improvement across their school career and ultimate success in the achievement of those goals, based on appropriate external and school-based measuring techniques.
>
> (Townsend, 1994a: 48)

I strongly believed that local communities were the strength of schools and so should be considered and involved when we made decisions about the education of their children. Thus the move towards the system of self-managing schools was something that I agreed with, despite Mr Spring's view that I am the DOE's 'regular critic' (Spring, 1997:1). When the *Schools of the Future* program was announced in 1993, the program seemed to fit my definition very well. On the surface, it looked as though this was the next step in a continuing development of community based schools where high levels of interaction between teachers and parents enabled schools to respond to their local communities. *Schools of the Future*, in theory, was a positive step in this direction and I said as much in an article for the *Education Age* (Townsend, 1994b).

However, there is also a government ideology that has instigated the cutbacks as part of a move to make the user pay, that is, privatise education. Now, up to 90% of costs (for the poorer, low fee paying denominational schools), and an average of about 70% of the cost of sending a child to non-government schools is supplied by the combined support of Commonwealth and state governments. In 1994-95, the public purse provided an average of $3117 for each student in government schools and $2307 for each student in non-government schools (Senate Employment, Education and Training References Committee, 1997: 27).

The ideology of choice and the market has been brought to bear. More than a decade ago, Hedley Beare considered the impact of perhaps the most pervasive force in recent times for education:

> Education's corporate image has now become a matter of survival. So if your school wants customers and resources in the next few years, you had better proclaim how good it is, how competitive are its services, how excellent its staff, and you had better not advertise its deficiencies. you had better use its resources - capital, monetary, personnel - in ways that will maximize profits. Over the next decade, only successful, positive, confident, client-oriented schools will have a right to survive, or be rewarded with improved resources.
>
> (Beare, 1982: 17)

The rhetoric says that one could choose a school just as easily as one could choose a car. However, the reality of this in the real world is limited to the people who have resources. The poor have as much chance of choosing to send their child to a high fee paying school (either government or non-government) as they have of choosing a Rolls Royce as their preferred method of transport. The truth is that some people will send their child to the nearest school and will use public transport, or walk, not because they want to, but because they have neither the resources nor the understanding to do so. The only way that the choice issue and the social justice issue can be reconciled is if all schools provide equal value, but in different areas of human knowledge. Choice becomes a matter of what one wants to learn rather than how well one will be taught it.

The ideology of both Federal and State governments and their commitment to the privatisation concept have had a real impact on schools in Victoria. Recent decisions by the newly elected Commonwealth government push the privatisation/choice issue further than ever before. They have reduced the per capita funding for education, particularly in government schools, even further and, at the end of 1996, introduced a number of changes that potentially will have a dramatic effect on funding public education.

First it removed any barriers to the establishment of non-government schools. This enabled anyone to establish a school and receive Federal funding for each of the children attending. Then, it established what was called the Enrolment Benchmark Adjustment (EBA). A benchmark of 29.4% was set as the national percentage of students enrolled in non-government schools, although each state varied from this figure slightly. Under the scheme a total of $1712.50 would be deducted from expenditure on government schools for every new student that enrols in a non-government school. The Australian Schools Lobby (1996: 3) reports 'The Federal government justifies the cut of $1712.50 per student with the argument that state governments "save" twice that amount each time a student moves from a government to a non-government school.' Table 8 indicates the effect that this would have had on Commonwealth funding of government schools in Victoria had the scheme applied for 1995-96.

Table 8: Victorian students in government and non-government schools

	government schools	non-government schools	totals	% in non-government schools
1995	514,805	255,472	770,277	33.17%
1996	517,062	259,393	776,455	33.40 %

Since the percentage of students in non-government schools has increased by 0.23%, this becomes the base figure for the calculations. The $1712.50 is deducted for 0.23% of the 782,712 students in the state (ie. 1786 students). Thus the state of Victoria would have received 1786 X $1712.50 or $3,058,525 less from the Commonwealth under the EBA scheme despite having 2257 additional students.

The impact of the new Federal Youth Allowance scheme, which might see up to 6000 mostly disaffected students remaining at, or returning to, Victorian secondary schools as early as the middle of next year. Of course the likelihood will be that the vast majority will end up in state schools. With the 'allowance' being paid to the parents, who may or may not then pass it on to the individual student, and no indication of where the additional funding for managing the educational programs of these students is going to come from, this scheme might rightly give state school principals some cause for concern. At a time when state governments are severely cutting education budgets themselves, decisions such as these make enrolment in non-government schools even more appealing than it was before.

Again, we can look at some of the statistics to indicate the changes that have occurred in Victoria since 1984. Table 9 indicates that the proportion of state funds expended on school education has dropped substantially more than the comparatively fewer students in schools might have predicted.

Whereas student numbers dropped by 13.1% as a proportion of the Victorian population between 1984 and 1994, the expenditure on education dropped by 20%, over 50% more than what the numbers might have suggested.

Table 9: Victorian students and
Budget allocations

	Victoria 1984	Victoria 1994	% Change
primary and secondary students as a percentage of total Victorian population	19.9%	17.3%	-13.1%
education expenditure a percentage of total state expenditure	20.5%	16.1%	-20.0%

Victoria has been the state to suffer most from funding reductions over the past few years. Whereas, on average across Australia, government expenditure on schools increased by around 9.4% (from $4265 to $5063 per pupil) from 1992-3 to 1995-6, Victoria suffered a decline of about 5.2% (from $5070 to $4807 per pupil). This trend suggests that the Victorian government accepted the premise that there was too much money being spent on education and that productivity had not matched the expenditure. Nevertheless, according to the 1995-96 Commonwealth Grants Commission Assessments (Hind, 1997), Victoria was still spending around $8.48 per head of population more than was expected by the Commission.

However there is evidence that government funding is no longer enough for schools to operate their programs, even at a minimal level. Parents are taking more and more responsibility for funding the education of their children, despite the rhetoric that government education is free. A study of 640 low-income families conducted by the Smith Family in four Australian states, Queensland, South Australia, New South Wales and Victoria (Griffith, 1997: 38) found that secondary school parents paid in excess of $3000 per year to meet annual education expenses, including uniforms, excursions, fees, and the like.

A study conducted by the Victorian Opposition (Harland, 1997) which consolidated the non-salary income and expenditure of 237 Victorian schools, including 57 secondary schools and 5 P-12 schools found that on average $489 per secondary student was raised locally for direct school costs, through income streams such as fees, equipment and materials, camps, excursions and through fund raising activities. This represented about 33% of the non teacher-salary component of the school's income. This percentage of funds raised locally substantially agreed with the earlier findings of Townsend (1996a), who also indicated that the actual raising of funds varied dramatically from school to school. The school most capable of raising funds locally indicated that it was able to raise more than $250,000 per year compared to less than $2000 per year for the one least capable.

Specific examples provided evidence of how the reliance on locally raised funds created inequalities for children. In two small rural schools in different regions (97 and 93 students), one indicated that it could raise an average $316 per pupil per year locally and the second only $43. Since staffing allocations and other factors would provide approximately the same grant from the government, one school would have an additional $26,000 to spend on school projects. Similarly, in two larger suburban schools (564 and 588 students), one indicated that it could raise an average of $359 per pupil per year and the second $33. Again, if other factors were roughly equal, one school had $180,000 more to allocate per year than the other. The ability to purchase extra computers, library books, and the like, varied greatly from one school to the other.

The evidence suggests that the restructuring activity has allowed some schools to increase their capabilities when it comes to raising funds, but for others the struggle is becoming more and more difficult. It has probably always been the case that levels of

local funding will differ because of the socio-economic area in which the school is located, but now that there are diminishing government funds, the reliance on locally raised funds to provide a quality program is much greater.

The balance of evidence suggests that the vast majority of schools are struggling to raise sufficient funds to compensate for the decrease in government funding, thus creating increased pressures on principals and school councils to ensure that families pay fees, even if they are struggling to make ends meet (see, for instance Brotherhood of St Laurence, 1996). Local fundraising is no longer for 'extras', but is now being used on curriculum and other programs central to the schools' operations. The Report *Not a Level Playing Field* (Senate Employment, Education and Training References Committee, 1997: 24-25) argued:

> The retreat of governments from their responsibilities to provide an adequate school education is apparent in a number of ways. The evidence indicates:
>
> - an apparent decline in the level of government funding in recent years
> - that privately raised funds are making an increased contribution to the total expenditure on school education, a contribution that at the local level of school operating costs is nothing less than crucial, and
> - that schools have come to rely on privately raised funds to provide essentials, not just extras.
>
> Cumulatively, the evidence before the Committee is compelling. The level of government funding for schools is inadequate.

The impact of these funding cuts on school retention is difficult to predict, especially since government expenditure attempts to even out disparities by providing additional grants to some schools. However, the report *Debunking Myths About Public Schools* (Association of Californian School Administrators, 1996) argues that there 'is a direct cause and effect relationship between student achievement and the amount of money states spend per pupil.' It argues that in lower spending states, fewer pupils see further education beyond school as an option, whereas higher spending states encourage more students to undertake the Scholastic Aptitude Test (SAT), which determines who will go onto college. Evidence is provided to indicate that in the USA in 1995, for each of the seven states with the lowest per pupil expenditure on education, less than 10% of High School senior students sat the SAT, whereas for the seven highest spending states the percentage of High School senior students that sat the SAT ranged from 47% to 81%. These figures lend support to the words of James Coleman over three decades ago:

> Schools bring little influence to bear on a child's achievement that is independent of his background and general social context...this very lack of an independent effect means that the inequalities imposed on children by their home, neighbourhood and peer environment are carried along to become the inequalities with which they confront adult life at the end of school. For equality of educational opportunity must imply a strong effect of schools that is independent of the child's immediate environment, and that strong independence is not present in American schools.
>
> (Coleman *et al.*, 1966:325).

As we have seen there appears to have been a deliberate attempt by both federal and state governments to move some of the funding of schools into the private sector. Table

10 indicates that in Victoria these policies have had a substantial impact, with a fairly substantial swing away from government schooling, from 29.3% in 1984 to 33.2% in 1996. It needs to be said that Victoria, along with the ACT, has always been substantially higher than the Australian average when it comes to students attending non-government schools, but that this has been an increasing trend in recent years. There are a number of factors that may have contributed to these figures, from having a larger proportion of people from the Catholic or Anglican faith that choose a religious education for their children, to a family preference for the independent (non-government, non-systemic) sector, to general concern with the way in which education was heading under recent governments.

Table 10: Students in government and non-government schools

primary and secondary students	Victoria 1984	percentage share	Victoria 1996	percentage share
government	572613	70.3%	522524	66.8%
non-government	241715	29.7%	260189	33.2%
total	814328	100%	782713	100%

Recent shifts from government to non-government schools have been almost totally due to a substantial increase in the number of students attending the independent (that is, non-government, non-systemic) school sector. Between 1986 and 1994 there was a 14% increase in students attending these schools.

Table 11 indicates that the student teacher ratio in government and non-government schools is now more or less the same, brought about by an improvement in the non-government sector and a 13% worsening for government schools.

Table 11: Staff-student ratios: government and non-government schools

Staff-student ratio (all schools)	Victoria 1984	Victoria 1994	% Change
government schools	13.3	15.0	+13.1%
non-government schools	16.1	15.2	-5.6%
all schools	14.0	15.1	+7.9%

However, since Catholic and Anglican schools reflect the whole spectrum of social class in the same way that government schools do, the big gain in lowering class sizes has been in the independent sector. Although specific figures are not available, many independent schools use their small class sizes as a marketing issue to attract families from government schools and this trend is expected to continue into the next millennium. On the other hand, government school class sizes have increased dramatically. In primary schools, the percentage of classes above 25 went from 39.7% in 1992 to 63.1% in 1996 and on average secondary school class sizes increased by 15% over the same period. If the future is seen to be an educational marketplace, then the main competitors for the state school sector may well be the independent, rather than the systemic, schools.

It could be argued that the education system in Victoria is merely following the broader social trends currently espoused by governments of both persuasions. Started by the

Federal Labor government as a means of keeping up with overseas trends, the economic rationalist position might be seen as a means of pacifying and supporting the rich at the expense of the poor. Australia has seen virtually no change in unemployment since 1984 and neither the Labor nor Liberal government seems to have paid anything more than lip service to doing something about it. All the while we have seen profits rise and executive salaries increase, seemingly at the expense of jobs or wage rises for workers. It is clear that the supporters of moves towards charter schools, Grant Maintained Schools and the like, have adopted an economic rationalist position for education, so one possible future for education is a continuing trend away from a commitment to government schools and support for the privatisation of education.

While recognising, as I think many others also did, the rather difficult economic position in which the new Victorian liberal government found themselves in 1992, right from the start there seemed to be somewhat of a gap between the rhetoric of improvement espoused by the government and the reality of what was happening in schools. School communities may have had difficulty resolving the seeming contradictions that:

* quality of student learning outcomes could be raised simultaneously with the elimination of more than 4000 teaching positions;

* access to a quality education (called quality provision) could be brought about by shutting over 300 schools;

* the quality of teaching could be improved by disbanding teacher registration provisions;

* schools could provide a quality education to all students while there was a cut in the state education budget of over $350 million, which immediately affected the levels of language and support services to students;

* a collegial atmosphere could be promoted while principals were required to identify teachers who were considered 'least effective' and therefore subject to removal from the school;

* we could encourage quality people into teaching by both underpaying and vilifying the profession (eg any failure in literacy is the fault of the teaching profession);

* government schools could be shut if they had less than 175 students (primary) or 400 students (secondary) on the basis that they could not provide a broad enough curriculum, yet government funds could be provided for private schools of 20 (primary) or 80 (secondary), some using the buildings of recently shut government schools.

* the quality of an education system is merely the sum of the quality of its various schools and can by measured by asking parents to comment on the progress of individual schools, rather than the system as a whole.

* the quality of education for all students can be improved using the business principles of the market and choice.

* that a performance management system for principals could be successfully implemented at a time when the Department's perception of the principals' contributions was invariably lower than the perception of individual principals and their independent review panel.

The international research seemed to support school self-management when it indicated that school-based decision making encourages the local community to become more involved in schools. Campbell (1985: 21) concluded that 'school site councils have been effective in bringing more people into the school decision-making process and in providing schools with a vehicle for school wide planning and individual program implementation.' Guthrie (1986: 306) argued, 'unless policies are identified that unleash productive local initiatives, the reform movement seems likely to lose its momentum.' Some of the school-based decision-making literature (eg., Henderson, 1987; Henderson and Marburger, 1986; Henderson and Lezotte, 1988) suggests that if decisions relating to school personnel and activities are made at the school level then there would be a better chance of having the right decisions made than there would be if the decisions were made away from the school at a district, regional or state level. Rosenholtz (1989), in her analysis of schools that were improving and schools that were not, concluded that the success of any strategy for enhancing student performance depended largely on the empowerment of the people at the school site.

However, the research also showed that such structural changes create initial anxiety and confusion (Griswold, Cotton and Hansen, 1986), but do not necessarily improve decision making at the local level if, for no other reason, than such decision making is mostly related to downsizing, rather than developing, the organisation. If this is the case, then anxiety may become the teacher's constant companion in the foreseeable future.

The *Schools of the Future* is a program similar to others which now exist in many parts of the world. It pushes the boundaries of school self-management perhaps further than any other large system. Within a broad cyclical framework of curriculum, people, resources and accountability (described in Caldwell, 1996; Spring, 1997), a range of strategies was put in place to fulfil a series of objectives. *Schools of the Future*, it was claimed, (Hayward, 1993) would:

* encourage the continuing improvement in the quality of educational programs and practices in Victorian schools to enhance student learning outcomes;

* actively foster the attributes of good schools in terms of leadership, school ethos, goals, planning and accountability process;

* build on a statewide framework of quality curriculum, programs and practices;

* encourage parents to participate directly in decisions that affect their child's education;

* recognise teachers as true professionals, able to determine their own careers and with the freedom to exercise their professional skills and judgements in the classroom;

* allow principals to become true leaders in their school with the ability to build and lead their teaching teams;

* enable communities, through the school charter, to determine the destiny of the school, its character and ethos;

* within guidelines, enable schools to develop their own programs to meet the individual needs of students; and

* be accountable to the community for the progress of the school and the achievements of its students.

After more than four years of the system, it is obvious that the Victorian education system was close to, or at, the cutting edge of educational thought in many areas. In a very short time it had implemented self-managing schools, introduced computer technology into administration and multi-media and satellite technology into teaching. It introduced a curriculum framework and tied the triennial review process to progress in these frameworks. It put more of the total education resources than any comparable education system into the hands of school communities (although the British are rapidly catching up) and attempted to tie the level of resources to the needs of individual students. It introduced a reward system to encourage increased performance of teachers and administrators. In short, the Victorian government showed a commitment to educational change unsurpassed by any other Australian school system.

There is evidence that many of the changes have been accepted by both principals and school communities. Since 1993, the Victorian Cooperative Research Project each year has asked principals to indicate their opinions about a range of outcomes of the implementation of *Schools of the Future*, including their levels of confidence about the outcomes, the expected benefits that have been realised and the problems associated with the implementation. The 1996 survey (Education Victoria, 1997a) indicates that principals were moderately confident that their schools would attain many of their objectives including some related to:

* student learning - schools would develop their programs to meet the individual needs of their students (mean = 3.4, where 5.0 was the highest level of confidence), improved learning outcomes for students (3.3) and that resources would be allocated to the identified educational needs of students (3.5)

* local decision making - school communities would determine the destiny of the school (3.3), would make the school accountable to the community (3.8) and actively foster the attributes of good schools (3.9), a more relevant and responsive curriculum (3.2), improved long term planning (3.4) and shared decision making (3.5)

* leadership - the *Schools of the Future* program actively fosters leadership (3.9), allows principals to be true leaders (3.3), establishes management structures (3.6), better personnel management (3.4) and develops a leadership profile that suits the needs of the school (3.0)

* staffing - improved staff performance (3.3), recognise teachers as true professionals (3.2) and more cohesive staff and community (3.0)

* curriculum - the *Schools of the Future* program would encourage the continuing improvement in the quality of educational programs and practices (3.6), give the school the opportunity to innovate (3.2), provide a more relevant and responsive curriculum (3.2) and a series of responses that indicated the Curriculum Standards and Frameworks (CSF) improved the capacity to plan appropriate curriculum activities.

Townsend (1996b) reports that school communities, parents, teachers and school councillors, were very positive about many of the features of the *Schools of the Future* program, including the school charter process, the school goals and the relationships developed between classroom and parent, school and home.

However, there are still concerns about some aspects of the system. In *School Effectiveness and the Decentralisation of the Management of Australia's Schools* (Townsend, 1996c) and in *Leading and Managing* (Townsend, 1996b) I spent some time trying to establish whether or not *Schools of the Future* could make the difference in what I considered to be the key issue, that of student outcomes. I was unable to come to the point where I was prepared to say, unreservedly, that it did.

Schools of the Future indicated that it would 'encourage the continuing improvement in the quality of educational programs and practices in Victorian schools to enhance student learning outcomes' and, as we have seen above, principals think that they are on the way to achieving this. However, this claim is more supported by hope than by any real evidence. The international research led Brian Caldwell, the person seen as the theoretical architect of the *Schools of the Future* program, just after its implementation to argue:

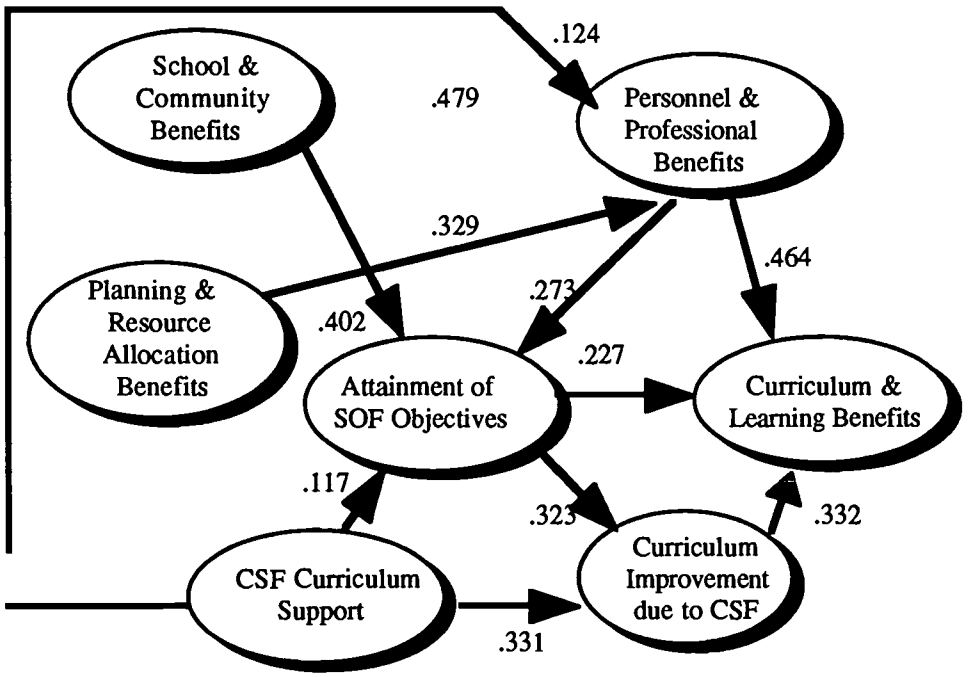
> While research has not yet revealed a direct cause-and-effect relationship between decentralisation of management and improved outcomes for students, the body of evidence points to a significant contribution in this direction...that decentralisation enhances job satisfaction and professionalism on the part of principals and teachers.
>
> (Caldwell, 1993: xiii)

Despite there being no data-related evidence related to improved student performance since the commencement of the *Schools of the Future* program (which is to be expected, given that the program has only been operating for a limited time), Caldwell (1996: 1) claims that '[T]here is early evidence, however, that there are some effects on learning from structural reform where such reform is coherent and comprehensive.' He provides as evidence the application of structural equation modelling using the LISREL 8 treatment of the opinions of principals collected in the 1995 survey of the Co-operative Research Project (Directorate of School Education, 1996).

Caldwell argues:

> While these findings are based on the perceptions of principals, the direct and indirect effects...are consistent with expectations for the successful implementation of a scheme of local management....
>
> Clearly, the principals who report curriculum and learning benefits tend to be those who have reported benefits in other domains that have emerged with the Schools of the Future program, including the capacity to select staff, increased flexibility in the use of resources, and the involvement of the community.
>
> (Caldwell, 1996: 17)

This analysis resulted in the construction of the figure below.



Explanatory regression model showing interdependent effects among factors influencing perceived Curriculum and Learning Benefits showing standardised path coefficients

(From Caldwell, 1996: 18)

To my way of thinking, this statement does not really say anything more than principals who feel there has been increased student learning also feel positive about other things as well. It could be argued that such principals have a rosy perception of everything. Further, principals' opinions do not provide 'evidence' that student outcomes have been affected at all, only that they think they have been.

One difficulty that we have in collecting such evidence is that the tools we use for measurement create difficulties of their own. For instance, the VCE scoring mechanism automatically categorises student results on the normal curve. If all students increased their performance by 50%, but still maintained the same rank order as before, they would still receive the same mark. This makes it difficult to judge the overall improvement of the system, except by using external tests (such as the Third International Mathematics and Science Study - TIMSS), but because of the way these have been constructed, there are difficulties here as well. The TIMSS study is particularly interesting because of the heat (but not necessarily light) that it generates in politicians. We need to recognise that the TIMSS results only provide part of the story. If, for instance, Singapore only studied fifteen topics and Australians studied thirty, Australia would be automatically at a disadvantage because Singapore would veto the other fifteen topics. Because eighty per cent of the countries involved in the study must agree to the questions being asked, the focus of the tests is narrow rather than broad. If Australians only studied the same fifteen topics as Singapore (but with twice the amount of time spent on them) then we would expect our students to be better than they currently appear to be. The real question from TIMSS is not 'How do proceed up the league table?' but 'Do we want our students to have a broadly or narrowly focused curriculum?' We need to answer this question first before we can proceed to the other.

Another difficulty for the claim made by the proponents of the self-managing school is that the international evidence has not yet found any linkage between that form of management and improved student outcomes. Even the oldest of the attempts to encourage school self-management (Edmonton, Canada and Dade County, Florida) have only been able to report increases in the levels of satisfaction by parents, teachers, students and school personnel (Brown *et al.*, 1990:247) in the first instance and the professional status of teachers (Collins and Hanson, 1991: 4) in the second. They have no evidence that self-management, in itself, has improved student achievement.

Whitty (1994:6) suggests that the local management changes in the United Kingdom had not altered children's learning in the positive way that might have been expected, with 34% of head teachers in a study conducted by Arnott *et al* (1992) thinking there had been an improvement, 31% thinking there had been a regression and 35% being unsure. In New Zealand 46% of principals and 41% of teachers felt that the quality of children's learning had improved since the shift to school-based management (Wylie, 1994).

Bullock and Thomas (1994), in their review of the Locally Managed School in Britain asked a series of questions that related student learning to school self-management. When asked whether 'children's learning is benefiting from LM' the percentage of secondary headteachers agreeing with the statement increased from 65% in 1991 to 80% in 1993 for larger schools, but from 45% in 1991 to 50% in 1993 for smaller secondary schools. It seems the smaller the school, the more burdensome the impact of local management has been. For the response to the question 'as a direct result of LM, standards of education have improved in my school' the results indicated an improvement, but not yet to the level of majority acceptance. Again, the size differential seems critical to the result.

In concluding that the impact of LM upon pupils' learning is complex, Bullock and Thomas refer to the concern expressed by some headteachers 'about an apparent shift in emphasis away from matters explicitly "educational", towards a situation where decisions are based more on financial considerations' (Bullock & Thomas, 1994: 143). Bullock and Thomas (1994) argued: 'Put simply, LM may have brought benefits to learning in schools where the financial situation is healthy. [But a] reduced budget could result in unwelcome consequences for children' (Bullock & Thomas, 1994: 137).

There have been a number of instances in the United States where restructuring activities have led to higher student achievement, but these are not necessarily associated with school-based management and can only be considered as altering individual schools rather than whole school systems. Stringfield (1997) discusses the Barclay-Calvert project, where a high achieving school (Calvert) supported a low achieving school (Barclay) in the implementation of the Calvert program, with remarkable results. Codding (1997a) discusses the strategies she implemented to turn around a low achieving high school in California. Stringfield *et al* (1996) discuss the development and progress of the New American Schools program, with seven design models that seems to improve student learning. Newmann and Wehlage (1995: 3), after examining schools across the United States in which restructuring had created significant improvements in student achievement at various year levels and in a range of academic subjects (maths, English, sciences, social studies), concluded:

> The most successful schools were those that used restructuring tools to help them function as professional communities. That is, they found a way to channel staff and student efforts toward a clear, commonly shared purpose for student learning, they created opportunities for teachers to collaborate and help one another achieve the purpose; and teachers in these schools took collective - not just individual - responsibility for student learning. Schools with strong professional communities were better able to offer authentic pedagogy and were more effective in promoting student achievement.

However, Elmore argued:

> [T]here is little or no evidence that [site-based management] has any direct or predictable relationship to changes in instruction and students' learning. In fact, the evidence suggests that the implementation of site-based management reforms has a more or less random relationship to changes in curriculum, teaching, and students' learning.
>
> (Elmore, 1993, p. 40)

The *Successful Schools* conference seemed to add further evidence that *Schools of the Future* may not be able to deliver what it promised about student outcomes. Even Caldwell admitted:

> Simply shifting responsibility, authority and accountability to the school level will not, by itself, have impact on learning and teaching unless explicit linkages are made.
>
> ...there will be no impact, and that is what the research has shown. This is most evident in recent meta-analyses on the impact of school-based management (SBM).
>
> ...They [Summers and Johnson, 1996] conclude, with justification, that 'there is little evidence to support the notion that SBM is effective in increasing student performance. There are very few quantitative studies, the studies are not statistically rigorous, and the evidence of positive results is either weak or non-existent' (p 80)
>
> (Caldwell, 1997a: 2)

Other speakers at the conference supported this contention. Codding (1997b: 15) argued:

> ...almost none of the widely advocated reforms - modular scheduling, open space, individualized instruction, different school governance experiments, vouchers, charter schools, the various curriculum reform initiatives - have survived or changed student performance

Hill and Crevola (1997: 2) argued:

> Improving the quality of teaching and learning in schools is not an easy matter. There have been many attempts to raise standards by one means of another, but reformers have invariably found that it is difficult to improve learning in a sustained way across more than a handful of schools at any one time.

Dale Mann (1997: 6) quoted Steinberg (1996):

> [T]he failure of the school reform movement to reverse the decline in achievement is due to its emphasis on reforming schools and classrooms, and its general disregard of the contributing forces that, while outside the boundaries of the school, are probably more influential.

But we do need to ask ourselves a few questions. Why has the *Schools of the Future* program, identified as 'world's best practice just a few years ago, now been slated for change? What has happened in the past four years to cause the Department to move away from the program? Much of the evidence linking self-management and student outcomes was already available before *Schools of the Future* started. Has change become so rapid that even educational change, which historically took much longer that changes in commerce and industry, will expect consistent and continual change every few years?

The revelations by various people at the conference suggested that the next wave of schools is already with us less than four years after the implementation of the last one. These new bold changes to the self-managing school model emerged somewhere in 1996. First we had the *Schools of the Third Millennium* conference. Then, Caldwell (1996) argued that:

> 'there are three tracks in the re-engineering of school education:
>
> - Track 1: Creating systems of self-managing schools in the public sector (time horizon 5 years)
> - Track 2: Unrelenting focus on restructuring learning and teaching (time horizon 10 years)
> - Track 3: Re-engineering school education: a *gestalt* for schooling for the knowledge society (time horizon 15 years)
>
> (Caldwell, 1996: 1)

It could be argued that these three tracks indicate the level of influence that *Education 2010* might have had, as they look very similar to the proposals suggested there:

1. The development of the self managing LC. This had been largely completed by 1998 through the Schools of the Future program.

2. The creation of a self managing teacher/knowledge navigator in the period from 1997 to 2005. This was achieved through a review and redesign of the teaching profession. This second stage proceeded concurrently with a third;

3. The creation of the self managing student. This process also commenced in 1998. This program aimed to liberate the learner, and to create an autonomous student who could plan, negotiate and manage his/her own programs of learning from a variety of educational providers in a system dedicated not only to lifelong learning but also to learner driven learning.

(Preferred Futures, 1996: 15)

In between December, 1996 when he presented a paper in Thailand and June, 1997 at the *Successful Schools* conference (1997a: 1) Caldwell's three tracks had changed their timelines. Track 1 had gone from 5 years to 3 years, track 2 had gone from 10 years to 5 years and track 3 had gone from 15 years to 10 years. This is probably an example of the next wave hitting us quicker than we thought. The interesting thing about his presentation is that it is a recent addition. Didn't we all think that *Schools of the Future* was designed to improve student learning and take us into the knowledge society?

If we have just come to the end of the first track, then track two is with us now and track three will probably be right behind. Presumably there will be an increased focus on teaching and learning for the next few years. This may come as a surprise to school communities who might have thought that student-outcome focussed school charters, the Curriculum and Standards Frameworks, standardised testing, detailed monitoring of children's progress (through programs such as KidMap) and performance bonuses for principals and teachers, based largely on student achievement, are already doing that.

In an article for the 'Opinion Age' Caldwell (1997b) identified two possible models, the British Grant Maintained Schools (GMS) and the American Charter Schools as possible future models for Victorian schools. Both seem to have problems. Dr Judy Codding (1997b: 15), Vice-President of the National Center on Education and the Economy in Washington, DC, told the conference 'almost none of the widely advocated reforms - modular scheduling, open space, individualized instruction, different school governance experiments, vouchers, charter schools, the various curriculum reform initiatives - have survived or changed student performance'.

The charter school example provided by Caldwell is interesting from other perspectives as well. First, what does it mean when he says scores have improved dramatically? In the early 1990s the Americans had developed a series of 8 educational goals (which became known as Goals 2000). One of the goals related to student achievement. Yet the analysis of the progress of the goals reported in *Goals Report 1995* (National Education Goals Panel, 1995) shows that in reading achievement, 28% of grade 8 students and 34% of grade 12 students nationally were considered proficient. There had been no change since the first analysis in 1992. In each instance, students were asked to read a passage and then respond to a series of questions that ranged from 'easy' through 'moderate' and 'challenging' to 'very challenging'. The results for mathematics were even worse (25% in grade 8 and 16% in grade 12). Similar results for writing, geography and history showed a system in crisis.

It was even worse if you happened to be in a minority group. For instance, only 12% of African Americans and 18% of Hispanics were 'competent' in grade 12 literacy in

1994 and 3% of African Americans and 6% of Hispanics were 'competent' in grade 12 mathematics. Despite this, 83% of black students and 62% of Hispanic students completed their high school qualification.

California was worse than the national average in both reading and mathematics. This suggests that children in very poor schools might improve markedly, but still not be proficient. A single example of a charter school that works, as provided by Caldwell, does not translate into large scale success. This adds credibility to Codding's statement that the use of the normal curve in intelligence testing and the perceived connection between intelligence and academic performance led many teachers in America to consider 'it would be damaging to the kids to ask more of them than they were capable of. For those in the bottom half of the distribution, the decent thing to do would be to give them high marks for showing up and not causing too much trouble.' (Codding 1997b: 2).

Professor Caldwell also refers to GMS in a positive light, despite the fact that the British Government is bringing them back to be part of the system. At the conference (Bell, 1997), Michael Bell, Principal of Castle Hill School in England, indicated that as a GMS, he went from a person in charge of 20,000 pounds to a person in charge of 2 million pounds. Significantly, however, only 1% (20,000 pounds) of that amount was generated by locally raised funds. Government supplied the other 99 per cent. There are no compulsory charges. We need to ask ourselves why is it that only 5% of schools opted to become GMS schools, despite many incentives provided by the Thatcher government? Could it be that most schools see themselves as having a responsibility that goes beyond the immediate clients and to the country itself?

Could it be that the market economy will make good schools better, but leave those that can't get into the elite group behind? It is interesting to note a recent *Education Age* article that talked about New Zealand's recent decline in literacy on a world level. It suggested that 'New Zealand had the largest gap between majority and minority children of any participating country.' New Zealand is now into its tenth year of self-managing schools that were introduced with budget cuts similar to those that occurred in Victoria. Is this a sign of our future?

Why is it that Schools of the Future, touted as being 'world's best practice' in 1993, needs to be changed after less than five years of operation? From any reasonable point of view, one would have to argue that it is too early to judge whether or not the scheme has had any real impact on student performance. Children who started the program in Year 7 are not yet in VCE. So why change the program before it has been fully tested? Could the new focus on quality, on technology, on teaching and learning, be done under the rubric of *Schools of the Future*? Could it have been done under the old centralised system?

Perhaps the greatest criticism of all is that the people who developed the system are now wanting to change it. It would seem to me that if the first 'track' has not touched the hearts and minds of teachers, the real instigators of student learning, then the second track might be too late. The situation suggests that the government could well increase their efforts to work with teachers (and principals) to encourage the acceptance of current reform, before the next step is taken. The next section of the paper will take a look at what some of those steps might include.

Hughes (1996: 1) argued 'We may be tempted to ask why we should use a business concept in the reform of education. Business has not been uniformly successful, even in surviving. Of the top 100 firms on the business magazine Fortune list of 1970, one third had gone out of business by 1990.' Are we to accept the possibility that one third of our schools will not be in existence in twenty years time? What are the implications of this for communities and individual students? One difference between business and education is that if one car company goes out of business, there is another model that we can buy. We might have to go a little further to get it, but we only have to go once. But what happens if a school goes out of business? Either it will be replaced by a school of another type (privatisation) or we will have to send our children to another school further away, not just once, but twice a day for the rest of the child's schooling. Both alternatives will be more costly for families.

Already rural Australia is crying out about the demise of communities. Large banks have left town, leaving just Automatic Teller Machines (ATMs) or a couple of hours drive to the nearest bank. Hospitals and schools have been shut down by governments on the basis that they are too small to be 'economic'. So the local teacher can no longer coach the town football team, the ATM can't open the bowling for the town cricket team and the nursing and teaching staff no longer organise the local art show. Losing these services diminishes us all, yet governments and big business seems to turn a deaf ear to anything that does not pay its way.

The VASSP's preferred view of education, *Education 2010: A Preferred Future for Victorian Education*, is a visionary document. It seeks to place the changes currently impacting on the present into some future perspective. It talks about autonomous, community based Learning Centres. It talks about a world of peace and harmony, it incorporates forward thinking, from changing societies to changing technologies. Given the aims and promises of *Schools of the Future*, it seems to be the logical next step.

However, it will not all be acceptable to everyone. Some will see it as inappropriate, others will see it as unobtainable and yet others will argue that it is just plain wrong. Tickell (1996) suggests there is a 'genuine idealism underpinning much of the document' but also calls it a 'bizarre document' that might be regarded as 'surrogate criticism of current government policy - a strategy normally used by dissidents in societies where open criticism is dangerous'. Certain groups within the educational community, almost certainly teachers, and perhaps parents as well, may be concerned about the drastically changed teacher working conditions and the substantially increased role for parents. Other groups, concerned about the funding of education, may be worried that the use of an *Educard* may play into the hands of the economic rationalists currently making decisions about education. The notion that students might attend only on one or two days a week might also give cause for concern, particularly given some of the state and federal government moves over recent years. Who ensures learner-driven learning for students who may not want to learn?

However, *Education 2010* does respond to the fact that the demography of Australia is rapidly changing. Table 12 shows that although our population is rising slowly, the proportion of people under the age of 14 is dropping rapidly. This must have an impact on schools in the future, not only because there may be fewer school age children, but also because there will be a proportionately larger group of older people who will need health care, the other major state expenditure.

Table 12: Proportion of Australians
under the age of 14

Population	Australia 1984	Australia 1997
Total	15.5 million	18 million
% under 14 years	21%	18%
% over 60 years	12%	16%

Schools may well need to mount a campaign that educationally active older people have less need of health care than those who waste away immediately after they retire, if we are not to see a massive shift of resources from education of the young to aged care.

The changing age of our population has been brought about by a number of social and family changes. Table 13 shows that that family structures in Australia have also changed. Now less than fifty percent of families have dependent children. Some families have children that have completed their education and are now working, so no longer can be called dependent. How much support can schools expect from families without school age children, especially since other social issues (higher education, health, welfare) might take precedence? It would seem that only if schools provide appropriate and attractive programs for people other than children, will we see their continued existence in the long term.

Table 13: Proportion of Australians
in various family groupings

Family Types	Australia 1984	Australia 1997
couples + dependent	46%	40%
one parent + dependent	8.7%	9.5%
couple no dependents	39%	45%

This changing nature of families is a reflection of a number of factors. First, the mean age of both males and females getting married for the first time continues to increase, as shown in table 14.

Table 14: Mean age of first marriages

Marriage Age	Australia 1984	Australia 1997
Males	23.4	27.3
Females	21.0	25.3

This suggests that people have been trying to establish themselves before getting married and having children. Although there are no comparative figures for 1984, in 1964, just one generation ago, 23% of women had given birth to their first child by the age of 24, but by 1994 only 13% had given birth to their first child by the age of 29.

Then there is the increased divorce rate, which has nearly tripled over the past decade and a half, as shown by Table 15.

Table 15: Number of divorces per thousand marriages each year

Divorces per 1000 marriages	Australia 1984	Australia 1997
	5	13

We also have a more comprehensive range of ethnic groupings to deal with than was previously the case. Table 16 indicates the changing proportions of people born in various parts of the world. Such changes have had a dramatic effect on the range of community languages spoken and taught in schools. Gone are the times when Latin, French and German were the only languages taught.

Table 16: Proportion of Australians in Europe and Asia

Major Birthplaces	Australia 1984	Australia 1997
UK/Ireland	7.2%	6.6%
Other Europe	7%	4.4%
Asia	3.4%	5%
Total Overseas	20.8%	23.2%

Table 17 indicates recent migration patterns that have brought these changes about.

Table 17: Proportion of Australians migrating from Europe and Asia

Migration	Australia 1984	Australia 1997
Europe	54%	29%
Asia	3%	57%

All of these statistics indicate that schools and teachers can no longer rely upon children as their only, or even their major clients. It is obvious that governments are no longer as dedicated to education for all as they were in previous times and that this lack of dedication is a result of a declining proportion of the community that have an active interest in education and an increasing marginalisation of the families that do. If schools, in any form are likely to survive in the longer term, rather than being replaced by a combination of computer assisted learning, organised recreation and a widening of the provision made available for various members of the community, based upon their ability to pay, then they must immediately undertake a review of their whole reason for existing.

With this background in mind, we can now at last come to some of the issues that will confront school administrators over the next decade or so. There are many that could be candidates, but I wish to concentrate on just three. The first is the issue of technology

which will change teaching and learning as we know it. Second, I wish to make some comments on the current paradigm of the school. If we didn't have schools today and we wanted to develop a place that would satisfy the educational needs of a modern, developed, technological society, what would it look like? Finally, I would like to look at the changing role of the principal from academic and administrative leader for child learning to change manager for community education.

Technological change, teaching and learning

Bill Gates has argued that we have seriously overestimated the extent to which technology will develop over the next five years, but have seriously underestimated its development over the next fifty. We now need to deal with the possibility, that somewhere in the not too distant future, we will have virtual classrooms, with students plugging their helmet and gloves into their computer at home to become virtually surrounded by their classmates and the teacher. Or we could have students walking out their front door onto the Steppes of Africa or the ice of Antarctica. Such a development is no more or less feasible than the Internet would have been to the scientists of the 1940s who would walk for five minutes to get from one end of their computer to the other.

One wonders what Plato, who was concerned about the introduction of writing because he suggested that once thoughts hit the paper they would leave the mind, would think of the new technologies. Could it be that the advent of new whiz-bang methods of computer aided learning will see the demise of more pedestrian forms of information collection, such as listening to teachers and reading books, as students demand that they be entertained while they learn? At the recent *Successful Schools* conference, Dale Mann (1997) argued the case for 'serious play' and suggested that if schools did not develop a partnership between the home, the entertainment industry and technology in the next few years, then the element most likely to disappear was the school. *Education 2010*, at the very least, has responded to the concern that if children might not be customers in the future then schools must reassess their position in terms of both clients and programs.

It was interesting at the 1996 American Education Research Association conference in New York to hear Andy Hargreaves indicate that he (along with Seymour Sarason and Joe Murphy) was one of the few academics remaining who still wrote all their work by hand. It seemed rather strange to me that three of the most critical thinkers in the area of educational change had refused to embrace perhaps the major factor related to that change, technology. I guess it is because one of the problems with technological change is that its timeline is no longer compatible with that of education. Once, because technological change took place over decades rather than days, education was able to incorporate it into the teaching framework. The change from blackboards with chalk to whiteboards with erasable writers did not take place overnight, and it didn't really matter because the framework of teaching largely stayed the same. In addition to this, teachers and teaching methods were notoriously traditional in outlook. New-fangled things like overhead projectors were purchased because they were new and interesting, but were then left to gather dust in cupboards because it was just as easy to write on the board.

The argument that a surgeon of the 1890s would be lost in a modern hospital but a teacher of the 1890s would fit right in to a modern classroom has been used before, but perhaps until the last few years, the analogy was fairly accurate. However, the advent and subsequent development of computer technology has changed all of that. There is no doubt that technology, particularly computers, will play an ever increasing role in educational settings of the future.

Technological change today is geared to commerce. If a business does not immediately adopt any new technology that emerges it may fall behind its competitors, so the speed

of introducing new equipment, new techniques and new ways of looking at the world continues to accelerate. The number of people connected to the Internet has doubled or trebled each year since it became available to the public. However, it could be argued that learning and knowledge will be the commerce of tomorrow. As technology takes over more and more of the physical contributions that humans have made in the past, as we are seeing in the present, then the intellectual contributions will have to increase. Schools and teachers, generally speaking, have not kept pace. Dale Mann (1997: 2) suggested that all this needed to change. He argued that we 'chronically confuse the broad and multi-source event of "education" with the expensive and troubled business of "schooling"'.

This is despite much research evidence that the home is far more influential than either the school or the classroom when it comes to predicting student performance. The industry of school effectiveness was established to prove that schools made a difference. A crude analogy might be: if we put up a large wall around the school to keep the influence of the outside to a minimum, then schools will make a difference. Of course, one of the first things discovered was that home-school relations were one of the critical factors in school improvement. The school effectiveness people proved what they set out to disprove. Schools might make a difference by themselves, but they can make so much more of a difference if the family is working in concert with the school, regardless of the parents' own educational backgrounds.

Mann, along with the other key speakers at the *Successful Schools* conference, all referred to the situation best summed up by Steinberg (1996) '...(T)he sorry state of American student achievement is due more to the conditions of students' lives outside of school than it to what takes place within school walls.' As we have seen from my analysis of the current status of families earlier, the outlook in education is grim for up to sixty percent of the population. The only difference is that under current arrangements, individual schools, rather than the government will have to take responsibility.

Mann advocates a new partnership with the home, using what he calls 'serious play'. He argues that programs such as *Carmen San Diego* is a curriculum, that helps students learn while keeping them entertained. Mann and Shakeshaft (1991) found that 17% of American mothers in a national sample preferred their child doing school-assigned homework only, but 35% preferred 'serious play' only (where the material linked curriculum with entertainment or play) and a further 45% preferred both together. Mann argues that teachers must be involved in the development of such programs, or it will be done by others with no real concern for the educational process.

This point of view was also taken by Neil Elliott (1997), Education Manager of Optus Vision. He indicated that the current pounding surf of technology would become a tidal wave in just a few years time. The interactive television that Jack Minzey and I wrote about one educational generation ago will be available to everyone through cable services. Currently 20 Victorian schools are involved in a school based Broadband project, where the Education Channel is supplemented by high speed internet browsing and CUSeeMe, which allows visual interactions between PCs. What implications does this have for schools and, perhaps more particularly, teachers?

One difficulty generated by new technologies for schools is the amount of professional development required just to keep up with the changes occurring. In the past decade, there have been limited numbers of computers in schools and even fewer teachers who knew what to do with them. How many times has student been asked to fix a problem that a teacher cannot fix? Now there is great pressure to use computers as an educational tool, which means that every teacher must have an understanding of how to use them as a central component of learning, so they are not simply used as a 'filler' by classroom teachers.

Given the changes in software in particular, it could be estimated that at least the equivalent cost of the computer, in time terms if nothing else, would be required to train the person who uses it, and that this cost is one that is ongoing. If schools decide that this money is to come out of already tight budgets, it may well be that some things have to go. One current response seems to be a narrowing of the curriculum being supported. Townsend (1996b) reported that of 435 priorities in 152 school charters, 72% of first priorities and 60% of all priorities were confined to a very narrow curriculum base, namely, those that were tested, those that were made compulsory by the Department of Education or those that attracted special grants from the government. Art, Social Education, Personal Development and Music hardly received any support at all.

This could mean that subjects like art, music, physical education and so on, which are already under stress, may have to give way so that 'basic skills' can be reinforced. Instead of buying art equipment, sports equipment and musical instruments, many schools are pushing their resources into the technology areas, leaving parents who want their child to have these 'peripheral' learnings to pay for it themselves.

Caldwell's third track (1997a: 10-11) suggests that technology will change the face of schooling altogether: He identifies a number of features of schooling for the knowledge society:

- changes in teaching and learning as electronic networking allows 'cutting across and so challenging the very idea of subject boundaries' and 'changing the emphasis from impersonal curriculum to excited live exploration';
- schools as workplaces are transformed in every dimension, including scheduling of time and human resource management;
- The fabric of schooling is similarly rendered obsolete by electronic networking. Everything from building design to the size, shape, alignment and furnishing of space for the 'knowledge worker' is transformed;
- a wide range of professionals and para-professionals support learning. The role of the teacher is elevated, for it demands wisdom, judgement and a facility to manage learning in modes more complex and varied than ever. The teacher is freed from the impossible task of designing from their own resources learning experiences to challenge every student: the resources of the world's great teachers will be at hand;
- a capacity to work in teams is more evident in approaches to learning. The concept of 'pastoral care' is as important as ever;
- The issues of access and equity will drive public debate until such time as prices fall to make electronic networks as common as the telephone or radio;
- The concept of the virtual organisation or the learning network organisation is a reality. Schools take on many of the characteristics of such organisations, given that learning occurs in so many modes and from so many sources, all networked electronically.

Given the influence of Caldwell's ideas on the current Victorian government, this may be their view of the future too. But as we have found from recent events, the implementation of this might be seen as another opportunity for government to lower its financial commitment to education. Perhaps it might do well for principals and school communities to recall something I said earlier:

> ...arguments that may suggest replacing expensive teachers with machines that cost less while still performing a similar task may become more attractive.

> ...When the community at large has these feelings about education, it makes it easier for governments to cut education budgets.
>
> (Minzey and Townsend, 1983: 11)

It would seem that if we would like to maintain schools in some physical form, rather than moving to Caldwell's virtual school, we are going to have to review who our clients are and what they will be doing at schools, and we will have to do it rather quickly.

Brian Staples (1989) once called schools 20/20 institutions, that served 20% of the people for 20% of the time. We might make the comparison with hospitals, that other major user of state finances that are (theoretically at least) open all of the time and serve the whole community. If we do not move schools rapidly towards what Staples called 100/100 organisations, the chances of schools, teachers and parents becoming increasingly marginalised as they first, become a smaller proportion of the community and second, be seen as not offering services as important as health or welfare, increases day by day. If the promise of *Education 2010* is to be realised it must be the community as a whole that supports it and we must start the campaign today.

The new concept of 'school'

The Australian Council for Educational Administration, in the middle of 1997, held its first Virtual Conference. A group of people provided a range of papers, which were all placed on the Internet. Participants in the conference were given access to the site, were able to download the papers and comment on those that they wanted to through email. This conference, and the formal one that preceded it, provided a range of opinions about what the future held for schools, ranging from '...the formal education system could be said to be in its last throes' (Spender: 1997:1) to '... the most probable state of schools in 2007 is that they will be much the same as they are now' (White, 1997:1).

In only one of the sessions that I attended at the 1996 AERA did anyone contemplate the notion that the structure of the school in the future might be totally different to what it is today. It concerned me to think that most of the forward thinkers felt that school would still be much the same, probably because I feel that it has to be different if it is to survive. Given this, I guess that the major issue for school administrators over the next few years is to focus on school as it is currently structured and to make some predictions about where it might be heading, but to do it on the basis of evidence, not emotion. That is why I am particularly pleased to have read *Education 2010*. It shows to me that, despite some of the problems that I have with the specifics of the document, Victorian principals and schools are still at the forefront of educational thinking.

During the ACEA Virtual conference, Beare (1997: 1) posed a question of a similar kind.

> If, as an educational planner, you were presented with a greenfields site on which a new town or suburb was to be built to accommodate dwellings for approximately 22,000 people, what schools or educational buildings would you offer the developer?

He argues that there are some things that you would not have, including:

- the egg-crate classrooms and long corridors;
- the notion of set class groups based on age-grade structures;
- The division of the school day into standard slabs of time;

- The linear curriculum parceled into step-by-step gradations;
- The parceling of human knowledge into pre-determined boxes called 'subjects';
- The division of staff by subject specialisation;
- The allocation of most school tasks to the person called 'teacher';
- The assumption that learning takes place in a place called 'school';
- The artificial walls that barricade school from home and community;
- The notion of a stand-alone school isolated from other schools;
- The notion of a school system bounded by a locality such as a state or even country;
- The limitation of 'formal schooling' to twelve years and between the ages of five and eighteen.

(adapted from Beare, 1997: 2-4)

If we accept his arguments about what schools in the future should not be, we have some indication of the task facing primary school communities, teachers and parents on the one hand, and governments and educational policy makers, on the other.

The evidence suggests that technology will continue to change, that government funding will continue to be a problem, that the social and employment needs of students will continue to change. We may need to consider different ways of staffing the school, with low teacher-pupil ratios for some grades to ensure all students have adequate skills to promote self-learning, and perhaps larger groups for computer based learning supplemented by small group discussions and social interactions. However, if the reform must continue at the speed that is currently indicated, perhaps we should be reviewing not just schools, but the underlying purpose of schools as well. Let us start with what we might consider to be the underlying goals education. I would argue that all of the separate objectives we might have for an education system can be consolidated into two all-encompassing goals:

1. To pass on the traditions, knowledge and attitudes held by the society from one generation to the next.

2. To help the individual develop the skills, attitudes and knowledge necessary for him or her to survive within that society over the course on one's lifetime.

The past and, generally speaking, present education system, namely primary and junior secondary schools for all, senior secondary schools for some and university for a few served society well in the industrial age. If the world of the factory and other unskilled jobs required people who undertook rote, repetitive tasks and were required to be punctual and submissive, the school years from 5 to 16 provided this. Those who were to be middle level professionals completed school and perhaps went to practical and theoretical training for specific tasks (teachers, nurses). The movers and shakers of society went on to university.

However, as I have already pointed out this societal structure can only exist in the future if we move to a third world economy. If we are to be competitive internationally and have first world living standards for all of our communities, this past education structure is no longer viable. We might argue, as Minzey (1981) has, that in the past educational change has been similar to rearranging the toys in the toy box, when what we really needed was a whole new box. If so what might that box look like? Having

identified what the purpose of the education system of the future might be we can then ask ourselves two complementary questions:

1. What does the society of the future need for its population?

2. What skills does the individual need in the future?

Given the changes that have been mentioned in other parts of this paper, I would suggest that, for the first time in history, the needs of society and the needs of the individual might be identical. The following list is a start, rather than being definitive:

- a strong skill capability in literacy, numeracy and computer technology;
- cultural , artistic and human sensitivities;
- the ability to change work as work changes;
- the ability to learn and relearn;
- the ability to make decisions, individually and in groups;
- the ability to use leisure time profitably;
- the ability to make maximum use of diminishing resources;
- a commitment to work with others to improve the community;
- the ability to use technology as a means to an end.

Many of the items promote community living as well as individual development because local communities might become the centre-point of democracy within the foreseeable future. As governments decrease the commitment to many of the services previously seen as their responsibility, local communities will have to generate ways in which they do it themselves. A number of recent activities, from safety house to neighbourhood watch to hospice programs to neighbourhood houses and community learning centres, are early examples of this move.

One of the difficulties that we have is that we are not establishing a system from scratch. We already have schools and they have been in existence for a century and a quarter. But perhaps what we need to do is to turn the clock back a little, to wonder what we might do if schools did not now currently exist.

Using the responses to the questions about what both society and the individual might require in the future as a basis, we might now ask ourselves how the education system of the future might be different to schools as they are now.

If we look at these two lists, we can ask ourselves where are the gaps in the current system that need to be addressed in order to move to the new system? How do we make the new system one that responds to what I have called the Third Millennium, rather than the Third World response to the current economic situation? The following table provides some attempt to provide such a comparison.

Characteristics of Schools Now	Characteristics of Education in the Year 2010
Everyone must attend formal education programs for a certain minimum amount of time.	People have access to learning 24 hours a day 365 days a year.
Everyone must learn a common 'core' of content knowledge.	Everyone must understand the learning process and have strong learning skills.
The information to be learned must be graded in a specific way and must be learned in that order.	Information is accessed according to the learner's capability.
What is to be taught, when it should be taught and how it should be taught should all be determined by a professional person.	What is to be taught, when it should be taught and how it should be taught will all be determined by the learner.
When a person leaves formal education they are fully prepared for society and life.	A person does not have to be in formal education to interact with learning networks.
Important learning can only occur in formal learning facilities.	Important learning is that determined by the learner and can be learned anywhere.
The terms 'education' and 'school' mean almost the same thing.	The term 'school' has disappeared.
The more formal education you have the more successful you will be.	The more learning you have the more successful you will be.
Once you leave school, you enter the 'real world'.	'School' is only one gateway to the 'real world'.

Some other changes that might be predicted, particularly if we see a future where schools are something like they are now, include extending the range of the school's activities. This might include extending the school hours from the current less than 15% of the year to something over 50%, extending the school clientele from the current 20% of the population to the whole population, or both. It does not seem cost effective to have a publicly owned building, with a range of facilities that might be used by all members of the community, shut for the majority of each day and on more than a third of the days in a year.

Promoting a range of inexpensive, relevant programs to community members outside of school hours seems one way in which the school might increase its base of community support, provide a much more cost-effective use of public plant and funding and perhaps raise some additional funds that might extend the range of school programs. If society is going to continue to change, even at its current rate, the need for re-training, for local support services (health, welfare, safety) will continue to escalate. Rather than having these services spread all over town, schools could be redesigned to incorporate them so they would be readily available to all families.

School administrators have to face up to a massive change in the way in which things are going to occur. In many cases schools are being reactive to decisions being made by others and coping as best they can with change as, and when, it occurs. The real difficulty for principals is to become pro-active, to take a peek into the future and to say this is where we need to be in twenty years time and this is how we can best get there. One difficulty they have is that the speed of change in education is now approaching the speed of change in everything else, and we haven't yet provided our administrators with all the skills they need to deal with it.

A second difficulty that you will have is the need to mobilise whole communities rather than just your own staff. All of the evidence points to governments accepting the Third World solution. There will probably be great resistance to moving to the Third Millennium solution because it will be more expensive in the short term. Principals may have to develop strategic partnerships that are different to the ones they are forging now. Current partnerships are being driven by competition, future partnerships will need to be driven by commitment to a broader goal. The VASSP will be more important than ever in terms of supporting the development of educational directions that promote the community as a whole rather than the privileged few. So what directions are necessary?

When asked what types of professional development they needed, as part of the Co-operative Research Project (Education Victoria, 1997: 69), principals identified a number of areas that indicated where they felt further development was needed. Those that attracted a more than fifty per cent response were:

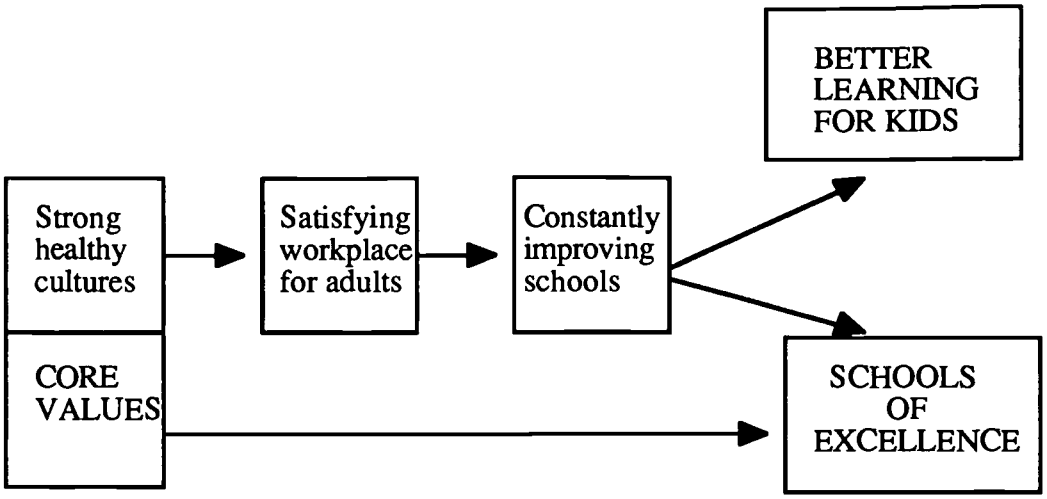
- Team development (84.5% of responses)
- Leadership (81.8%)
- Interpersonal Effectiveness (78.0%)
- Planning and Organisation (56.9%)

Those that were not as highly supported included 'Thinking and Judgement' (37.8%), 'Management of Self' (34.0%), 'Managerial Expertise' (34.0%) and 'Commitment to Excellence' (29.3%). These results indicated principals' strong belief in their own capabilities but a growing understanding that they can no longer carry the task themselves. Anecdotal evidence from the School Review process has indicated that principals need to have further knowledge in school evaluation processes, data interpretation and subsequent vision-building, particularly when it comes to refocussing the school towards a 'culture of learning'.

The past few years have seen the development of a plethora of leadership terms: 'transformational leadership', 'rational leadership', 'charismatic leadership', 'symbolic leadership', 'visionary leadership', 'educative leadership', 'invitational leadership', 'authentic leadership', to name just a few.

However, given the position I have taken so far, my guess is the future task of school leaders over the next decade or so is going to be one of change agent, and it would seem to me that all of the above will be encompassed by this overarching role.

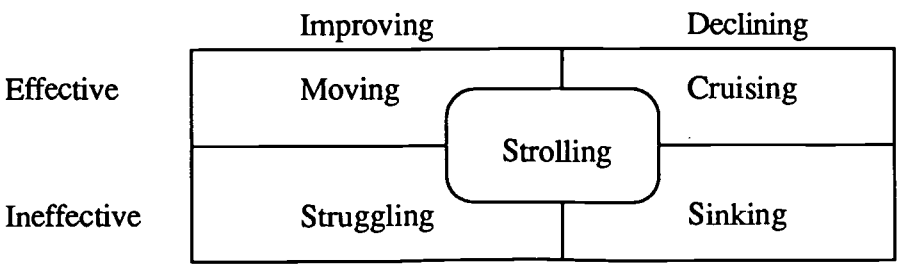
Perhaps the most critical factor in all of this reshaping is how the principal is able to promote the workplace as being a satisfying and productive place to be. Hallinger (1997, adapted from Saphier) suggested that the following model might connect the notion of school culture with school improvement.



One of the most useful of the papers presented at the *Successful Schools* conference in terms of looking towards the future was that by Louise Stoll (1997). She argued (p. 5) that there is little independent research evidence that showed that externally mandated changes, such as 'league tables of external test and examination results or inspections where 'failing' schools are publicly labelled...engender commitment on the part of those who have to implement the change'. Her focus brought together the disciplines of school effectiveness and school improvement as a means of establishing how schools might improve. She called on her previous work with Dean Fink (Stoll and Fink, 1996: 43) to define school improvement as:

> a series of concurrent and recurring processes in which a school:
>
> - enhances student outcomes;
> - focuses on teaching and learning;
> - builds the capacity to take charge of change regardless of its source;
> - defines its own direction;
> - assesses its current culture and works to develop positive cultural norms;
> - has strategies to achieve its goals;
> - addresses the internal conditions that enhance change;
> - maintains momentum during periods of turbulence; and
> - monitors and evaluates its process, progress, achievement and development.

Stoll and Fink (forthcoming) have characterised what we might identify as the two dimensions for judging the culture of schools, whether they are effective or ineffective and whether they are improving or declining.



Stoll (1997: 9-10) characterises these schools in the following way:

> The moving school is not only effective in 'value added' terms but people within it are also actively working together to respond to their changing context and keep developing...
>
> The cruising school ('effective' but declining) is perceived as effective, or at least more than satisfactory, by teachers and the school's community. It has a carefully constructed camouflage...it is usually located in a more affluent area where students achieve in spite of teaching quality...
>
> The strolling school is neither particularly effective nor ineffective. It is moving towards some kind of school improvement but at an inadequate rate to cope with the pace of change which therefore threatens to overrun its efforts...
>
> The sinking school (ineffective and declining) is a failing school. It is not only ineffective; the staff, whether through apathy or ignorance, are not prepared or able to change...
>
> While the struggling school (ineffective, but improving) is ineffective because its current pupil outcomes and school and classroom processes need attention, it is aware of this, and expends considerable energy to improve.

Stoll and Fink (1996) proposed ten cultural norms that focus on fundamental issues of how people relate to and value each other and, if practised, might influence school improvement. They added catch-phrases to articulate the core messages being promoted:

- Shared goals - 'we know where we're going'
- Responsibility for success - 'we must succeed'
- Collegiality - 'we're working on this together'
- Continuous improvement - 'we can get better'
- Lifelong learning - 'learning is for everyone'
- Risk taking - 'we learn by trying something new'
- Support - ' there's always someone there to help'
- Mutual respect - 'everyone has something to offer'
- Openness - 'we can discuss our differences'
- Celebration and humour - 'we feel good about ourselves'

(from Stoll, 1997: 12-13)

Education 2010 shows that principals are already well down the track required to move their schools from *Schools of the Future* to the next step in the process. However, there are some concerns that must be addressed, addressed quickly and in some detail.

The first of these is the notion of the *Educard*, which may be used by politicians as a justification for the introduction of vouchers in education. I have suggested elsewhere (Townsend, 1996c: 29) that vouchers might be rejected for three reasons:

- the debate about vouchers is not new and there is no evidence that a voucher system will work any better than other newer forms of resource allocation;

- to narrow the issue of resource allocation for schools in Australia down to the issue of vouchers is unproductive, since the debate in Australia has gone beyond vouchers;

- various Australian models, such as the Weighted Student Index of the Schools of the Future, are a sophisticated form of vouchers (that consider many forms of student disadvantage) that take us beyond the level of controversy that the simplistic view of voucher-education created.

Regardless of what the pundits might say, vouchers are the economic rationalists favoured means of funding education because it pushes the concept of the market to its end point. The most recent version to surface has been the report of Senator Vanstone's suggestion that the TER is an inappropriate and inequitable way of selecting students into universities which was announced in *the Age* on the same day (August 6) and on the same page (2) as the article Industry Commission report suggesting that university students should pay half the cost of their education and the rest should be attached to a voucher which allows students to attend any university that will take them. It seems to suggest that raising the cost of entry is a more appropriate way to select students than doing it on merit, however flawed that system might be.

If vouchers are brought in, they will be brought in for everyone (as hinted in *Education 2010*). Dr Kemp has already suggested this as being one of the things the Federal government is considering. This could mean that all students will be funded at the same level by government and it will then be up to schools to determine their client base by whatever means they wish. It will mean that the person going to the highest fee paying private school and the poorest government school will carry with them the same funding allocation, except perhaps for marginal additional support on the basis of the student's background. *Education 2000*'s *Educard* is based upon equity. It would be difficult to argue that many of the issues in this paper have increased equity over the past decade.

Social and economic disadvantage, despite all of the research evidence suggesting that this is the major reason for discrepancy of student outcomes, already is one of the least financed elements in government funding. The *Guide to the 1997 School Global Budget* (Education Victoria, 1996) indicates that a student from a Non-English Speaking Background in years 7-12 and who has been in Australia for between 3 and 7 years is 'valued' at $700 (p. esl.2). This might include students from countries (eg Hong Kong, Germany) where English is taught to all students, but is not the first language. However, the most a student who has had socio-economic disadvantage for perhaps the whole of their school career is able to attract is $345 (sl.3). Financial disadvantage might be seen as the major concern, but it is the one that is funded the least.

It would be unwise to expect that current governments, or even recent governments, have had the interests of education at heart. The education profession as a whole has had to put up with a range of personal and professional attacks. In Victoria, successive Ministers of Education have made substantial attacks on teacher unions, then individual teachers, principals' associations and individual principals who have had the courage to speak out and, most recently, teacher educators. None of these attacks have been substantiated by evidence of any kind and could be compared with what Barber (1996: 55) in the United Kingdom called 'free-market Stalinism'. The model that he used to describe the policy process under free-market Stalinism included aspects such as 'invent a daft idea', 'invent a mythical problem which the daft idea is intended to solve', 'place some articles in the middle-brow tabloids about how serious the mythical problem is' and 'propose the daft idea as a solution'. He even provided a specific example (Barber, 1996: 58-59) that might sound familiar to Australian teachers.

> A particular policy example might help explain the cycle. The Centre for Policy Studies had consistently advocated that educating teachers in universities caused problems. Instead, the CPS argued, consistent with its market approach, schools should train the teachers they need when they need them. Over a long period, stories appeared from time to time in papers friendly to the government (such as the *Mail on Sunday* and the *Daily Express*) about either the poor quality or the political extremism to be found in university departments of education. In March 1993, John Patten announced that the training of teachers wholly in schools would be piloted from September 1993. In June - *three months before the pilots began* - a government circular stated that because the new scheme was so popular it was likely to be extended. In December 1993, after a handful of pilot schemes had been running for only three months, legislation was introduced making it possible to extend this scheme nationally. The teaching profession had little or no input at any stage in this process.

I would believe that if the VASSP wishes to pursue the issue of an *Educard* further, that they spend some significant effort to spell out exactly what it is they are, and are not, prepared to support so that there can be no suggestion that VASSP blindly accepts the rationalist perspective. After all, Mr Spring (1997:1) has taken pleasure in half-quoting me in a way that suggests that I agree with the allocation of government funding to 'students at risk'.

The second area that I think VASSP must address urgently is the issue of the future role of teachers in the vision portrayed by *Education 2010*. It would not be surprising to find that teachers felt a great deal of disquiet about the statement:

> Each LC has adopted its own appropriate arrangements relating to the proportion of short and long-term employees. All employees are on term, but renewable contracts. Most LCs have opted for a proportion of long-term employees of approximately 20-25% of their workforce.
>
> (Preferred Futures, 1996: 19)

This is particularly the case when no real attempt has been made to suggest what role teachers play in the change process over time. This may be seen by teachers as yet another attempt to marginalise them at a time when they are already under considerable stress. How did principals feel when Mr Gude announced that he saw no reason why a business manager could not mange a number of schools simultaneously? My own work has shown (Townsend, 1994a) that teachers are the critical factor when school effectiveness is measured, and that this is seen by principals, school councillors, parents, students and teachers alike. At a time when teachers are under such stress from other areas, the *Education 2010* reference is not as supportive as it might be.

It becomes important when building a vision that we see it from other perspectives as well as our own. As Tickell (1996: 6) points out:

> Teachers, who were not invited to contribute to this vision, will not be surprised to find that the principals favour flexible employment arrangements; for teachers, that is: the document is silent on the issue of principal's contracts.

At a time when we are seeking to improve teacher status, when we are seeking to attract the best and brightest into the profession, talking about short-term contracts and lack of tenure, without talking about other aspects of working conditions is not helpful. Caldwell talks about fewer, but much better paid, teachers and we would do well to celebrate and reward what good teachers have achieved by elevating their position to an

appropriate level in the plan. I think the VASSP will also do well to be much more specific about what they see as the role of the teacher (whatever it is called). The Knowledge Navigator and Mentor of the future may need considerably more and different skills and values than teachers have today. These will need to be addressed today, if they are to be available tomorrow.

I would also see the need for schools to involve themselves in strategic partnerships. The Learning Centre of tomorrow will not just emerge from TAFE and secondary schools, but will be an amalgam of primary, secondary, TAFE and adult education and a range of other public services as well. Now seems to be the time when these alliances will need to be developed so that we can develop a seamless education for people over the whole of their lifetime.

Perhaps my greatest concern is the underlying optimism of the document that both government and the community at large are supporters of public education to such an extent that lifelong education will be fully funded within the next generation, that social justice will become a reality and that the competition of the *Cowboy Culture* will be replaced by the co-operation implicit in *Spaceship Culture*. Nowhere is this optimism more evident that in the suggestion that one tier of government will vote itself out of power.

I think I have demonstrated that the level of optimism expressed by the document is not one that the recent past can support and, given this, that a great deal of work is necessary if the preferred future is to come true. One needs to be careful that the rhetoric of *Education 2010* is translated into very specific action plans, otherwise it may be used by others in ways that VASSP did not intend. The use of the *Educard*, having students attend for one and a half days a week, having only 20-25% of full-time teachers would all be very attractive to governments who wish to cut funding to public education even further. Selective use of the document might allow them to believe that you think these things are good ideas in themselves, rather than only as part of a broader package.

It will not be a matter of training leaders for the year 2010, but having school and community leaders taking charge now so that the possible future is also the preferable future. We could argue that, in these days of rapid and substantial change, to not have some vision of the future is to die. However, as Louise Stoll mentioned in her speech at the *Successful Schools* conference, if only one person has the vision, everyone else is likely to call it an hallucination.

My vision, as I have indicated in other places, is not that we will compete in a local market for students, but we will be well placed to be internationally attractive to students around the world. To do this we must stop competing amongst ourselves for limited community resources and pool our resources, knowledge and skills to maintain our position at the forefront of education.

In my view the best education that we can hope for, for our students, for our families and for Australia is one that is local (ie. in my community) and global (ie. provides access to the knowledge resources of the whole world). It is grounded in the community in which I live but opens up a world of possibilities. It is educative and it is social. It provides me with the skills that I need now and gives me access to those that I will need later. I am linked to my education at all times of the day and no matter where I am in the world. My school age children, the rest of my family, my neighbours and my friends can all participate with me. The Learning Centre has become a community facility which is sometimes used for the education of children and has replaced the school which was not a community facility, but was only sometimes used for the education of children.

Unless principals work with each other, and with teachers, parents and whole communities, to promote the Third Millennium, rather than the Third World, solution to our current economic restructuring, the technological age may have brought about the demise of 'public' education altogether by the year 2010.

The most critical challenge for those making decisions about education at this time, at whatever level they are being made, is the one addressed by adapting Judy Codding's (1997: 17) final words at the *Successful Schools* conference: 'The best guide I had as a high school principal was to try to do for the 2,500 students I had responsibility for in my school, what I would want done for my own three children'. We might now suggest that the best guide we, as educators, have for improving the quality of education provision for school communities throughout the state is to consider what we would want done for our own families. We would want the best school to be my local school.

REFERENCES

Alcorn, G. (1997) 'The generation of free love finds way to extend the fun' *The Age*, July 30, pp 1, 3.

Arnott, M., Bullock, A. & Thomas, H. (1992) Consequences of Local Management: An assessment by Head Teachers. Paper presented to the ERA Research Network, University of Birmingham, February 12.

Atkinson, J. (1997) 'Child Labour' Horizons, Issue 12 (Internet)

Association of Californian School Administrators, (1996)*Debunking Myths About Public Schools* Sacramento, CA, ASCA.

Australian Schools' Lobby (1996) 'The Enrolment Benchmark Adjustment' in *Skip, 1* (1), pp. 2-3

Barber, M. (1996) *The Learning Game*, London: Victor Gollanncz.

Beare, H. (1997) Designing a break-the-mould school for the future. A paper presented at the virtual conference of the Australian Council for Educational Administration, Hawthorn

Beare, H. (1982) 'Education's corporate image' *Unicorn*, 8(1).

Bell, M. (1997) 'Towards More Autonomous Schools: The UK Experience'. A presentation at the *Successful Schools* Conference, Melbourne, June 3.

Bordia, A. (1996) 'Reviewing the Results'. A speech made in a panel presentation at the UNESCO ACEID Conference, Bangkok (December).

Brown, L. R., et al. (1990) *State of the World: 1990*, New York, W. W. Norton & Co.

BSL (1996) What is happening to 'free' public education? Low income families experiences of primary and secondary education. *Changing Pressures Bulletin, No 3*, (Melbourne: Brotherhood of St Laurence) [photocopy]

Bullock, A & Thomas, H (1994) *The impact of local management of schools: Final report*, Birmingham, University of Birmingham.

Caldwell, B. (1993) *Decentralising the Management of Australia's Schools*, Melbourne, Australia, National Industry Education Foundation.

Caldwell, B. (1996) A *Gestalt* for the re-engineering of school education for the knowledge society. A paper presented at the UNESCO ACEID Conference, Bangkok (December).

Caldwell, B. (1997a) 'From Self-Management to High Performance'. A presentation at the *Successful Schools* Conference, Melbourne, June 3.

Caldwell, B. (1997b) 'Freedom, fear and the future as state schools graduate' *The Age*, June 10, P. A17

Campbell, P. (1985) *School Based Management Project: School Site Council Assessment Report*, Boston, Boston School District.

Carr, W.G. (1942) *Community Life in a Democracy*, Washington, D.C., National Congress of Parents and Teachers.

Codding, J. (1997a) 'Systemic Reform: A Case Study on Restructuring One American Public High School' in Townsend, T. (Ed) *Restructuring and Quality: Issues for Tomorrow's Schools*, London and New York, Routledge, pp. 161-181.

Codding, J. (1997b) 'Designing Highly Effective Programs for Successful Schools'. A keynote presentation at the *Successful Schools* Conference, Melbourne, June 3.

Coleman, J. S., Campbell, E., Hobson, C., Mc Partland, J., Mood, A., Weinfield, F. & York, R. (1966) *Equality of Educational Opportunity*, Washington, D.C., U.S. Govt Printing Office.

Collins, R. A. & Hanson, M. K. (1991) *Summative Evaluation Report School-Based management/Shared Decision-Making Project 1987-88 through 1989-90.* Dade County Public Schools, Miami, Florida.

Cuttance, P. (1997) 'Quality Assurance for Schools: Case Study - New South Wales' in Townsend, T. (Ed) *Restructuring and Quality: Issues for Tomorrow's Schools*, London and New York, Routledge, pp. 100-114.

Department of Education (1996) *Partners for Excellence: The Strategic Plan 1997-2001 for the Department of Education*, Brisbane, Department of Education, Queensland.

Directorate of School Education (1993) *School Charters Information Package for Consultation and Promotion.* DSE: Melbourne.

Directorate of School Education (1996) *A Three Year Report Card: Cooperative research Project Leading Victoria's Schools of the Future.* Melbourne, Directorate of School Education.

Education Department of Victoria, (1933) 'General Course of Study for Elementary Schools, 1934', in Victorian Education Gazette and Teachers Aid, 33, October, pp 434-531.

Education Victoria(1996) *Guide to the 1997 School Global Budget*, Melbourne, Department of Education.

Education Victoria (1997a) *Still More Work to be Done But...No Turning Back, Co-operative Research Project Report*, Melbourne, Department of Education.

Education Victoria (1997b) *Public Accounts and Estimates Committee: Public Hearing*, Melbourne, Department of Education, June.

Elliott, N. (1997) 'The Next Wave in Education: The Convergence of Telecommunications, Entertainment and Information'. A presentation at the *Successful Schools* Conference, Melbourne, June 3.

Elmore, R.F. (1993) 'Why restructuring won't improve teaching.' *Educational Leadership*, 49(7), 44-48.

Galbraith, J.K. (1992). *The culture of contentment* Boston, Houghton Mifflin.

Griswold, P., Cotton, K. & Hansen, J. (1986) *Effective Compensatory Education Source Book, Vol 1: A Review of Effective Educational Practices*, Portland, Oregon, Northwest Regional Education Laboratory.

Gude, P. (1997) 'Successful Schools: Building on Schools of the Future'. A keynote presentation at the *Successful Schools* Conference, Melbourne, June 3.

Guthrie, J. (1986) 'School-Based Management: The Next Needed Education Reform', *Phi Delta Kappan, 68* (4), pp 305-309.

Hallinger, P. (1997) Creating School Cultures that support learning. (photocopy)

Hanushek, E. (1986) 'The Economics of Schooling: Production and Efficiency in Public Schools', *Journal of Economic Literature*, 24, 1141-1177.

Hargreaves, D. & Hopkins, D. (1991) *The Empowered School*, London, Cassell

Harland, P. (1997) School Budget Study (photocopy)

Hayward, D. (1993) *Schools of the Future: Preliminary Paper.* Melbourne, Directorate of School Education.

Henderson, A.T. (1987) *The Evidence Continues to Grow: Parent Involvement Improves School Achievement. An Annotated Bibliography*, Columbia, Maryland, National Committee for Citizens in Education.

Henderson, A.T. & Marburger, C.L. (1986) *Beyond the Bake Sale: An Educator's Guide to Working with Parents*, Columbia, Maryland, National Committee for Citizens in Education.

Henderson, A.T. & Lezotte, L. (1988) 'School-Based Improvement and Effective Schools: A Perfect Match', *Community Education Today*, 15(3), 4-5.

Hill, P. & Crevola, C. (1997) 'Redesigning Schools for Improved Learning'. A presentation at the *Successful Schools* Conference, Melbourne, June 3.

Hind, I (1997) 'Education: The state of Play'. A presentation to the Uniting Church Education Committee, August 8.

Hughes, P. (1996) 'Vision and Realisation: Re-engineering in the context of UNESCO's Vision: A Prospective on Re-engineering Education for Change'. A paper presented at the UNESCO ACEID Conference, Bangkok (December).

Karmel, P. (1973) *Schools in Australia: Report of the Interim Committee for the Australian Schools Commission*, Canberra, A.C.T., Australian Government Publishing Service.

McGaw, B. (1994) 'Quality, Equality and the Outcomes of Schooling: Key Issues'. Keynote presentation at the 7th Annual Conference of the International Congress for School Effectiveness and Improvement, Melbourne, Australia, January.

Mann, D. (1997) 'Using New Learning Technologies to Promote Successful Learning'. A keynote presentation at the *Successful Schools* Conference, Melbourne, June 3.

Mann, D. & Shakeshaft, C. (1991) *Study Box and the American Market for Serious Play*, Laurel Hollow, New York, Interactive Inc.

Ministry Structures Project Team (1986) *Taking schools into the 1990s : a proposal* Melbourne : Ministry of Education, Victoria, Ministry Structures Project Team, 1986.

Minzey, J.D. (1981) Community Education and Community Schools. An address at the State College of Victoria, Frankston, Australia.

Minzey, J.D. & Townsend, A.C. (1983) Core Plus Education: A Role for School of the Future, Ypsilanti, Michigan, Eastern Michigan University.

National Education Goals Panel (1995) *Goals Report, Volume One: National Data*, Washington DC, National Education Goals Panel.

Newmann, F.M. and Wehlage, G.G. (1995) *Successful School Restructuring: A Report to the Public and Educators by the Center on Organisational Restructuring of Schools*, Madison, Wisc, Wisconsin Center for Educational Research.

O'Neill, H. (1997) 'Secret Science' in *The Australian Weekend Review*, June 21-22, p. A5.

People Together Project (1996) Friends of Public Education: Do You Know These Facts (photocopy).

Planning Committee, SCV Frankston, (1979) *Submission of the State College of Victoria at Frankston to the Teacher Education Inquiry*, Frankston, State College of Victoria at Frankston

Preferred Futures (1996) *Education 2010: A Preferred Future for Victorian Education*, Melbourne, Victorian Association of State Secondary Principals.

Rafferty, F (1994a) 'Alarm at growth of 60-hour week.' *Times Educational Supplement*, 5 August, 1.

Rafferty, F (1994b) 'Many more heads leave jobs' *Times Educational Supplement*, 2 September, 9.

Raiche, J. J. (1983) *School Improvement: Research Based Components and Processes for Effective Schools*, Minneapolis, Minnesota, Educational Co-operative Services.

Rangsitpol, S. (1996) 'New Aspirations for Education in Thailand: Towards Educational Excellence by the Year 2007.' A paper presented at the UNESCO ACEID Conference, Bangkok (December).

Rosenholtz, S.J. (1989) *Teachers Workplace: The Social Organization of Schools*, New York, Longman.

Scheerens, J. (1992) *Effective Schooling: Research, Theory and Practice*, London, Cassell

Short, J.& Henderson, I. (1997) 'Costello links tax reforms to jobs' in *The Australian*, June 17, p 1.

Smyth, J. (1993) Schools of the Future and the Politics of Blame. A Public Lecture sponsored by the Public Sector Management Institute, Melbourne, Monash University, July 2.

Spender, D. (1997) From the factory system to portfolio living: Access, equity and self promotion in the 21st century. A keynote paper presented at the annual conference of the Australian Council for Educational Administration, Canberra.

Spring, G. (1997) 'Is there a crisis in Government Schools? Of Course Not!' Address to the Issues in Public Sector Change Lecture Series, University of Melbourne, May.

Staples, B. (1989) 'Ten Years Ago, and Ten Years Ahead'. A Keynote address to the Annual Conference of the Alberta Community Education Association, Banff Springs, Canada.

State College of Victoria at Frankston (1979) *Submission of the State College of Victoria at Frankston to the Teacher Education Inquiry* , Frankston, State College of Victoria at Frankston

Steinberg, L. (1996) *Beyond the Classroom: Why School reform has failed and What Parents Need to do*, New York, Simon & Schuster.

Stoll, L. (1997) 'Successful Schools: Linking School Effectiveness and School Improvement'. A keynote presentation at the *Successful Schools* Conference, Melbourne, June 3.

Stoll, L. and Fink, D., (1996) *Changing Our Schools: Linking School Effectiveness and School Improvement*, Buckingham, Open University Press.

Stoll, L. and Fink, D., (forthcoming) 'The Cruising School: The Unidentified Ineffective School' in Stoll, L. and Myers, K. (eds) *No Quick Fixes: Perspectives on Schools in Difficulty*, London, Falmer Press.

Stringfield, S. (1997) 'Underlying the Chaos: Factors Explaining Exemplary US Elementary Schools and the Case for High-Reliability Organisations' in Townsend, T. (Ed) *Restructuring and Quality: Issues for Tomorrow's Schools*, London and New York, Routledge, pp. 143-160.

Stringfield, S., Ross, S. and Smith, L. (1996) *Bold Plans for Schools Restructuring: The New American Schools Design*, Mahwah, NJ, lawrence Eflbaum Associates.

Tickell, G. (1996) '2010 Review' *Changing Education* *3*(3) September 1996, Deakin Centre for Education and Change

Toffler, A. (1970) *Future Shock*, London, Pan.

Townsend, T. (1994a) *Effective Schooling for the Community*, London and New York, Routledge.

Townsend, Tony (1994b) 'Slow evolution of education leads to Schools of the Future', in *Education Age*, July 19, p. 22.

Townsend, T. (1996a) Matching the goals of Schools of the Future with the demographic characteristics of their local communities. An unpublished research project funded by the Australian Research Council.

Townsend, T. (1996b) 'The Self-managing School: Miracle or Myth?' in *Leading and Managing*, 2 (3), pp. 171-194.

Townsend, T. (1996c) *School Effectiveness and the Decentralisation of the Management of Australia's Schools*, Melbourne, National Industry Education Forum.

Townsend, T. (1997) 'The Next Generation of Schools: Getting there from where we are now'. A discussion paper presented to the South Australian branch of the Australian Council for Educational Administration, February 20.

White, R. (1997) Schools in 2007. A paper presented at the virtual conference of the Australian Council for Educational Administration, Hawthorn.

Whitty, G. (1994) Devolution in Education Systems: Implications for Teacher Professionalism and Pupil Performance. A discussion paper. Melbourne, Australia, National Industry Education Foundation.

Weiss, A.R. (1994) Variations on a trend in public education: How schools are chartered in eleven states (and in the Russian Federation). (photocopy)

Wylie, C (1994) *Self managing schools in New Zealand: The fifth year*, Auckland, New Zealand Council for Educational Research.

APPENDIX: Extracts from the Submission of the State College of Victoria at Frankston to the Teacher Education Inquiry, 1979

SCENARIOS OF THE YEAR 2000

1. DEMOGRAPHY

- The population will be differentiated on the basis of the possession of specialised knowledge and skills.

- Population growth will continue.

- By acknowledging the children of immigrants as well as those children born outside Australia, over 50% of the population of Melbourne will have an ethnic association outside Australia.

- The proportions of population in the higher age groups of the population will have increased.

- The type of population in the future will change from a predominantly European origin towards a more Asian/European background with the subsequent alterations in cultural and religious patterns.

- As population grows there will be an increasing use of presently under-populated areas, or non-populated areas.

2. SCIENCE AND TECHNOLOGY

- Science and technology will continue their rapid development, and the process of 'cybernation' will spread.

- The development of automation will result in job elimination.

- The sophistication of the technology of eavesdropping will mean that it is possible to invade privacy without trespassing.

- The computer, together with such things as satellites, will have provided new and better information storage and retrieval systems which will change the pattern of communication.

- Developments in pharmacology and neurophysiology will have produced the technological means of controlling behaviour and changing personality in radical ways.

- Social attitudes will be so strong to the techniques noted above that they will be used only in a limited way.

- Significant moral issues will be raised by innovations such as:

- selective human breeding for high IQs; electronic record-keeping and surveillance; test-tube babies; and new propaganda techniques.

- New knowledge in the behavioural sciences will allow a better understanding of mankind, and provide the means to control human beings.

- The current trend of using scientists as advisers to government agencies will increase, and produce a ruling group of scientists and technocrats.

3. EMPLOYMENT

- The nominal hours per week of work will have decreased to 32-28 hours.

- Employment activities will be able to be classified on the following five-sector analysis:

  PRIMARY - Extractive: production of raw materials. Farming, mining, fishing, agriculture.

  SECONDARY - Manufacturing and Construction: the conversion of raw materials into finished products.

  TERTIARY - General Economic Services: the processing of matter or energy.

  QUATERNARY - Information Processing: the collecting or disseminating of symbols such as words, images, sounds, figures, or tangible objects, such as computer tape, money, cheques, bank statements, or title deeds which have a symbolic significance, and where the tools of trade are telephones, typewriters, chalk and pens.

  QUINARY - Quasi-domestic: services provided essentially at home, which are analogous to services provided at home - care of children and the aged, some maintenance.

- Many people will be working in jobs which do not exist today.

- People will change their jobs more frequently.

- The development and increase in importance of service industries will have resulted in an increase in the number of women in the work force, a need for workers with high education, and an increase in the importance of the consumer.

- Work will have to be invented to give people a feeling of social usefulness.

- Large multi-national companies will have decentralised many of their operations to small workshop units (10-50 people), constituting a return to the domestic system of industry which existed in the pre-industrial age.

- The concept of a lifetime career will no longer exist.

- The obsolescence of plant, product and skills will result in individuals seeking different forms of employment at different times of their lives.

- As more occupational roles will be concerned with information processing there will be an increase in the personal demands of individuals. Periods of work will therefore be punctuated with more and longer vacation periods.

- The increase in computerisation and automation will make specific and unique demands on the education system.

- Changing patterns of work and retirement will create two types of demand - education for retirement, and education during retirement.

- Some people will not be employed for the whole of their lifetime.

4. LEISURE

- The percentage of time spent on those activities on the attached chart which could be identified as leisure will have increased significantly for some members of the community.

- A reduction will have occurred for many people in Activity 3 (Income-earning employment), providing them with more time to devote to leisure activities.

- An increased percentage of time will be spent in overseas travel for leisure and recreational purposes.

- Work and occupational role will no longer determine so directly the lifestyles of individuals.

- The humanisation of work and the places of work will result in the emergence of different attitudes to work and to leisure.

- A large number of leisure-oriented markets will be created by the reduction that will occur in some people's working week, thus creating a prime industry.

- The distinction between work and leisure will not be so clearly defined, as people will be engaged in 'work' which does not lead to remuneration but to the exchange of goods and services.

5. ECONOMY

- The inequality in the distribution of goods and services will have diminished.

- The Gross National Product and the per-capita income will have increased.

- Despite the increase in consumption by all members of society, economic differences will remain the same.

- Economists will have at their disposal an extensive data base of economic statistics that will enable them to formulate and test macroeconomic theories of the national economy.

- Economic factors will be the most important ones considered when decisions are made about education and welfare.

6. SOCIETY

- Children will break away from the traditional family grouping and form other groupings.

- Barriers such as middle class/working class will not exist.

- Changes in family organization will result in major changes in the law.

- The significant increase in the quantity and quality of information will create an information elite.

- The availability and accessibility of some types of information may require the establishment of particular controls.

- The types of energy that will be used will be different.

- There will be a change in the types of food that are eaten, as more and more space is used to house the increasing population.

- There will be a greater emphasis on self-sufficiency.

- Fossil fuels will have all but disappeared.

- More reliance will be placed on human resources than on money or energy resources.

- There will be a shift in the need for money as a personal resource.

- Buildings that are presently used as office space will be used to house people.

- There will be an increase in the usage of available educational facilities and buildings.

- There will be a more efficient use of energy and manpower to make the best utilization of both.

- As fuel becomes scarce there will be less mobility in terms of travel from home to work or entertainment, with a consequential increase in the importance of local community facilities.

7. EDUCATION

- Education will have access to libraries of shared references through the computer, enabling learners in scattered locations to work together without leaving their own homes.

- Students in small or isolated institutions will have the same access to information as students in large educational institutions.

- The educational process will be free of locational constraints, as teachers/lecturers will be able to prepare material in their own homes, broadcast from local television and radio studios, and conduct seminars and tutorials by conference phone and videophone.

- Teachers/lecturers will be able to communicate directly from home with such things as a Eurodata network, which will supply them with microfiche facsimiles of any book or paper within minutes.

- The traditional pattern of being educated in the early years and 'filled up' with knowledge which will carry individuals through the rest of their lives will no longer be appropriate. Continuous education programs will be used to make up deficiencies.

- Skills other than the 3R's will be regarded as basic.

- Initial education will be specifically directed to fostering the ability of 'learning to learn'.

- Some education will continue to take place in institutions.

- The basic organisational module in educational institutions will be 'learning groups', not classrooms.

- The expertise needed to fulfil the needs of 'learning groups' will not be that possessed by teachers as trained in the 1970s.

- Education will be more directly related to human development patterns. As a consequence:

  formal education will not commence before the age of seven;

  students will seek prolonged periods of work experience before leaving the initial educational program;

  educational institutions will be catering for a mix of full/part-time students, old/young students.

- There will be frequent changes in the subject matter of education, as well as shifts in the emphasis given to components of the subject matter.

- There will be a great increase in the volume of knowledge that has a legitimate claim for inclusion in the curriculum.

- Obsolescence of information due to the increasing rapidity of change will increase the importance of continuing education.

8. PERSONAL RELATIONSHIPS

- People will change their partners, their friends, and their place of abode continually. A new education will have to provide information of a different moral scale to that which is presently provided.

- A gradual breakdown in the length of the relationships between individuals will bring about legal changes.

- Some children will never meet their parents. They will only receive information about them through educational means.

- Certain emotional and personality states will result from changes in technology.

- Changes in the law will bring about new crimes and eliminate old ones. In some situations money will be unnecessary. The stress involved in the interpretation of legal changes will have educational implications.

- As biological and technological advances will provide the means to eliminate hunger and poverty, the relationships that exist between workers and employers will change.

RESPONSIBILITIES OF THE TEACHER IN THE YEAR 2000

1. TO THE LEARNER

- To facilitate learning.
- To assess the educational needs of individual learners and to prescribe appropriate learning programs to meet these needs.
- To develop and continually to revise curricula to meet changing needs of learners.
- To update continually one's own knowledge and expertise to maximise effectiveness of learning experience.
- To develop effective communication, based upon an understanding and an appreciation of the changing world outside the traditional educational settings.
- To develop the skills necessary for the critical analysis of environmental reality.
- To clarify the learner's personal values to assist the development of an internally consistent value system.
- To develop in the learner effective decision-making abilities through critical analysis and value judgments.
- To organise and manage learning experiences in a variety of situations.
- To create a climate in which children can establish satisfactory relationships with other children.
- To demonstrate a capacity to command support, co-operation and productive effort of children.

2. TO COLLEAGUES

- To develop personal and professional attitudes necessary for work as a member of a team.
- To maximise learning outcomes through co-operation and sharing of personal resources.
- To establish appropriate relationships with a growing body of para-professionals and support staff.
- To accept responsibility for professional socialisation of new entrants to the profession.

- To establish levels of co-operation with other members of the teaching profession in the maintenance and improvement of educational programs.

- To work co-operatively with other professionals to produce teaching strategies appropriate for the achievement of instructional objectives.

3. TO COMMUNITY

- To develop a commitment to the concept of life-long learning and one's own involvement with all sections of the community.

- To contribute, along with various other agents, to the total social welfare program within the community, particularly as it relates to leisure and recreational activities.

- To assess educational needs of the community and to determine appropriate responses to those needs.

- To participate with others in the community in a wide range of educational decision making.

4. TO SELF

- To develop a philosophy of education and continually to reassess this as it relates to one's self and one's operation as a professional educator.

- To adopt strategies for coping with the stress of changing society and new roles and interpersonal relationships with students, colleagues, paraprofessionals and parents.

- To utilise research findings and other means of furthering professional growth.

- To make conscious efforts to improve one's professional competence to accommodate to the changing demands made of teachers.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

(Specific Document)

UD032170

I. DOCUMENT IDENTIFICATION:

Title: The next generation of schools : Learning from the past, shaping the present and leading for the future.

Author(s): TONY TOWNSEND

Corporate Source: MONASH UNIVERSITY

Publication Date:

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 1

The sample sticker shown below will be affixed to all Level 2 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 2

☒ Check here
For Level 1 Release:
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) *and* paper copy.

☐ Check here
For Level 2 Release:
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but *not* in paper copy.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Sign here→ please

Signature: A Townsend

Printed Name/Position/Title: ASS PROF TONY TOWNSEND

Organization/Address: FACULTY OF EDUCATION
MONASH UNIVERSITY
PO BOX 527 FRANKSTON VICTORIA 3199
AUSTRALIA

Telephone: 61-3-9904 4230

FAX: 61-3-9904 4237

E-Mail Address: tony.townsend@education.monash.edu.au

Date: 20/2/98

(over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ERIC Clearinghouse on Urban Education
Box 40, Teachers College
Columbia University
New York, NY 10027

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to: